# amateur radio

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# "AMATEUR RADIO"

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Vol. 34, No. 3




## FEDERAL COMMENT

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The dinosaur was a very large beast and in its day a very fearsome one.

It no longer exists because—among other things—it reacted too slowly to an antagonistic environment. The nerve messages that made its central system aware of danger, the act of decision made as a result of these messages and the return impulses sent to initiate action all took too long. So good-bye to the dinosaur. Or was it?

Might not today's Wireless Institute be likened to that prehistoric monster? Does not its present administrative organisation look remarkably like the sluggish nervous system of our late and unlamented beast?

Even a very cursory glance at the present mechanics of the Institute must show that it does.

If you as an Institute member are concerned with such things—as you should be—then you will know that some three or four years ago a proposal for Federation was put before the Federal Council. It has been discussed at each annual Federal Council since then and will undoubtedly be so again in Brisbane this Easter. The prime objective of this proposal was to simplify and streamline procedures and decision making within the Institute so that it could function as a dynamic entity.

The proposal was a bold one. The number of difficulties to be overcome in making it a reality were many. To a large degree these difficulties have been resolved. Right here and now we need from you—yes, you, not the other bloke—how you would like this Institute of ours to be—alive and active and aggressive as it could be if we were united or like the dinosaur—extinct.

HAROLD L. HEPBURN, FEDERAL VICE-PRESIDENT, W.I.A.

## CONTENTS

# SX28 RECEIVER MODIFICATIONS

*A. C. HAWKER,* VK3IB (Ex VK1AC, VK0AB, VR1B, VR3H)*

HEREWITH are details of the circuit modifications which have been carried out on the SX28 receiver in use here. This assumes you already have the original circuit schematic as found in the instruction book for the SX28 or SX28A.

The audio choke CH2 and associated capacitor C43 which comprise the bass audio filter have been removed as I personally found the filter to be of little real value and seldom used it. Its switch, SW10, has been replaced with a d.p.d.t. toggle which serves to transfer the audio input from the diode (a.m.) detector to the product detector and at the same time provide h.t. to the b.f.o. and product detector in the s.s.b. position. Make sure all the audio leads to this switch are in shielded lead.

The original a.v.c./b.f.o. function switch will need to be removed and replaced with one having four-pole, three-way capacity. A.v.c. "on" becomes "a.v.c. 1" (fast), a.v.c. "off" remains the same and "b.f.o. on" is now "a.v.c. 2" (slow). The attack time of the a.v.c. circuit is a little slow at 40 milliseconds but quite acceptable as the recommended attack time for s.s.b. A.v.c. action should be between 10 and 200 milliseconds. With values shown, the decay rate is 1 second in the slow position and 68 milliseconds in fast operation. These figures might be improved by experiment with other values and circuits but I find them very satisfactory indeed. The fast a.v.c. position is to be preferred for a.m. signals whilst the slow position gives more satisfactory control of s.s.b. and c.w. copy.

With the circuit as shown the "S" meter functions also on c.w. or s.s.b. provided the a.v.c. switch is not turned to the off position. I find there is absolutely no leakage from the b.f.o. into the a.v.c. circuit with the product detector provided reasonable care is taken with the shielding and layout of components. The screened lead to the b.f.o. pitch capacitor has been replaced with a length of co-axial cable and two plates have been removed from the variable condenser in order to provide finer adjustment. A larger knob on the b.f.o. pitch control is also of some advantage. The drive spindle of the bandspread control has been carefully ground down to approximately half the original diameter, resulting in an improved tuning rate. On the 20 metre bandspread dial this results in a rate of about 50 Kcs. per revolution of the tuning knob as about 100 Kcs. before.

R6 and R71 in the 6SA7 oscillator circuit plate supply have been removed or shorted out and this point returned to 150 volts regulated. I found that substitution of R31 with a VR150/30 regulator tube worked out just right with the existing 4K resistor R32.

You may need to experiment a little with the coupling capacitor to the product detector from the plate of the last i.f. amplifier V6. I discovered that 1 pF. was about right in my case. The usually recommended value of 10 pF. was found to be too large and resulted in overload of the product detector with considerable distortion and difficulty in resolving s.s.b. signals.

The amplified a.v.c. to the mixer and both r.f. stages has not been disturbed and still functions in the original manner. The modified i.f. a.v.c. circuit to V5 (6L7) as shown in the diagram provides all the benefits of "hang" a.v.c. quite adequately and efficiently holds down between-signal noise on c.w. and s.s.b.

The modification of the audio end of the receiver was forced upon me by a burnt-out loud-speaker transformer and having no suitable push-pull replacement available at the time. However, I feel the change is well worthwhile despite possible reluctance at first to interfere with hi-fi possibilities of the existing 8 watt push-pull 6V6 output stage. One major advantage is the immediate reduction in h.t. drain by about 40 milliamps and less heat generated internally by the extra 6V6 and the rectifier. Furthermore, the power transformer runs cooler and removal of one 6V6 frees a socket for the VR tube which can then sit conveniently next to the rectifier. I found it was possible to feed the remaining 6V6 plate supply from the output of the filter choke without the latter heating too badly—this may prove an essential move in any case since the hum might prove objectionable with the single-ended output stage fed direct from the input capacitor. I find the audio quality still very good on b.c. reception and 4 watts is still plenty of output if you want it. A small loud-speaker transformer easily replaces the old push-pull one and the 3.2 ohm output winding is connected to one pair of the original output terminals. This move has the advantage of being able to feed a loud-speaker voice coil directly without the necessity of an additional matching transformer as was required before to match either the 5K or 600 ohms output.

The 6SC7 (V12) phase splitter is replaced with a 6SJ7 and the socket rewired accordingly. Another possibility here is to retain a twin triode stage using one half as the audio amplifier and the other for a crystal calibrator but it would most likely be necessary to change to a tube having separate cathodes such as the 6SL7. I had already added a 100 Kcs. crystal calibrator previously employing a 6AU6 tube mounted atop the main tuning capacitor compartment so did not adopt this method which would have probably been a better arrangement. Mine is the standard calibrator circuit found in most copies of the A.R.R.L. handbook. I have fitted a small on/off switch for the calibrator mounting snugly between the "S" meter and the main tuning dial. Mounted symmetrically between the two tuning dial escutcheons on the opposite side I have placed a matching control which sets the muting level which is about to receive mention below.

Excellent stability is retained during transmission periods by opening the grounded end of the r.f. gain control (R2), thus allowing the local oscillator and b.f.o. to run continuously. Use of the original standby switch which interrupts the h.t. supply centre tap is hopeless as the drift is intolerable for s.s.b. vox operation. The addition of another variable resistor as a muting level control (about 5K) in series with the r.f. gain control will allow setting of monitoring level for comfortable monitoring of your own signals during transmission (especially useful on c.w.). This resistor is arranged to be shorted out, usually by a control relay in the transmitter, during reception to restore the receiver sensitivity to normal.

For s.s.b. operation I find the "Broad Xtal" position the most satisfactory with the "xtal phasing" set to place the rejection notch on the unwanted sideband. Alternatively the phasing control can be used in a similar fashion to the "notch" filters used in more modern receivers to reject an annoying heterodyne—or reduce it at least. If your crystal filter appears to be rather poor in selectivity (apart from bad alignment) you will find that taking the crystal holder apart and washing the crystal in carbon tetrachloride or just plain warm soapy water often works wonders.

Upper sideband reception I find about correct with the b.f.o. offset about 30 degrees clockwise and the same anti-clockwise for l.s.b. Once set, do all your tuning with the bandspread or main dial but slight manipulation of the b.f.o. control, especially with a large knob fitted, can be very helpful as a slight touch up to s.s.b. signals. With the modifications as described you should find that you can operate with full r.f. gain all the time provided the a.v.c. is operational. This is a blessing as you no longer have to dive for the r.f. gain control when a strong station comes on after copying a weak one and you no longer miss the weak signals after reading a powerful one—especially valuable on round tables. Receiver overloading will still occur with the r.f. gain fully up with a.v.c. off and manipulation of the r.f. control will be necessary when operating in this condition.

I now use my receiver almost continually with the a.v.c. on for copy of c.w. and s.s.b. signals and little alteration of the a.f. gain is required from signals of S9+ magnitude down to S1—2. Seldom do I have to alter the a.f. gain from a setting of 3 or 4 for comfortable loud-speaker operation unless the band is very poor indeed.

Another trump card of the SX28 receiver is its dual noise limiter circuits. Most receivers, even recent models, have only a simple a.n.l. in the diode detector, these are frequently quite effec-

* P.O. Box 35, Dimboola, Vic.

tive for a.m. operation but do not function when the b.f.o. is brought into operation for c.w. or s.s.b. copy and are of course by-passed if the receiver has a separate product detector. In the SX28, however, the i.f. noise silencing circuit can still be brought into operation in all modes so you have a feature here that is only to be found in the most expensive of late model receivers.

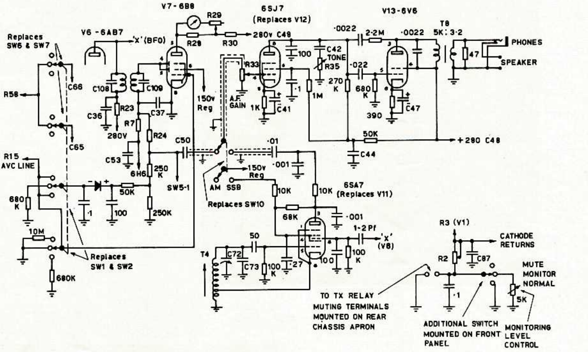
I have made up an adaptor socket to take a 6AM6 as replacement for the first r.f. tube. A 6AC7 would probably be equally as effective as direct replacement for the 6AB7 but it would probably be advisable to shift the a.v.c. to the suppressor grid to prevent blocking, alternatively remove the a.v.c. altogether from this stage. A further increase in receiver sensitivity can be obtained by using a 6AB7 in place of V2 and V6. When I originally pro—but was carried out in easy stages with the whole modifications being spread over a couple of years. I can assure you, however, that the effort is well worth it and that the old SX28 compares very favourably now with many modern receivers and even better than some!

Don't forget that the gating diode in the a.v.c. circuit must be one with a high back resistance, an OA210 is a sure fire bet even though it is really a power diode, but is cheap and fills the bill. Germanium diodes are unsatisfactory in this application as their reverse resistance is not high enough.

Since writing these notes I have been fortunate in procuring a copy of a comprehensive article on the same subject published in "Radio ZS," the magazine of the S.A.R.L., for March 1964. It is significant to note that their modifications are almost identical spread knob with a large instrument knob such as the Aegis MV1/F 3 inch diameter, preferably less flange, and the fitting of a small cranking handle to speed up full scanning of the bands.

The SX28 is a heavyweight of about 75-80 lb., and I found that a pair of solid, chrome handles, one fitted each side of the panel, made the task of removing and replacing in the cabinet much easier. The handles also match the general appearance quite handsomely.

Some oscillator pulling in either of the "a.v.c. on" positions was evident, but only when monitoring the local transmitter. This effect should be cured by removal of the a.v.c. from the 6AS7 mixer tube V3 and returning the grid tuned circuits to earth. (Lift R11 from junction of C21 and earth C21.) This modification was also recommended in the "Radio ZS" article.




cured my SX28 there were 6AC7's in place of V2 and V6 but I feel these tubes, although certainly increasing the gain, probably depreciated the signal to noise ratio.

I have also replaced the mains power transformer with one to operate directly from 240v. a.c. thus dispensing with the bulky extra nuisance of a step-down transformer—but this was actually forced on me when the original burnt out due to moisture accumulation after a lengthy absence in the Ellice Islands. I certainly do not regret the change and was lucky enough to find a replacement transformer with the same mounting dimensions.

All the above probably sounds like a lot of work—and it is, make no mistake to those I have developed and SX28 owners would find this very interesting reading. I quote the conclusion from this article, which states:—

"The SX28, as an a.m. and c.w. receiver, is capable of good, practical performance by modern standards. Attempts to modify sensitivity, selectivity or noise figure do not appear to be warranted and the changes necessary to include modern s.s.b. facilities need not be expensive or complex. Brought up to date in the manner recommended, it will form a worthy companion piece, performance-wise, to the modern s.s.b. transmitter."

An improvement in tuning handling can be obtained by replacing the band-

One of the advantages in placing the crystal calibrator atop the main tuning capacitor compartment is that the crystal socket becomes readily accessible by just lifting the hinged cabinet lid. Thus the calibrator crystal can be easily removed and any crystal substituted for checking. I found this facility extremely handy when grinding my own crystals and having previously set the receiver calibration with the calibrator it was used as the frequency meter. (Within limits of course.)

I hope my version of the modifications has been of some assistance and that your efforts are as gratifying as my own.

# A PRE-AMP. FOR 2 METRE F.M.*

*BYRON H. KRETZMAN, W2JTP*

THERE have been many 2 metre pre-amplifiers described in "CQ" in the past, all for the usual across-the-band Ham type of operation. This pre-amp. was designed especially for the "new"[1] type of v.h.f. operation, f.m., where high quality fixed tuned (crystal controlled) ex-taxicab and police receivers are used. Secondly, this pre-amp. may readily be adapted to serve as a two-set coupler, such as when it is desired to monitor two frequencies simultaneously, using a common antenna (146.94 phone and 146.70 r.t.t.y., for example).

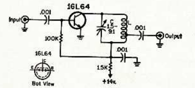
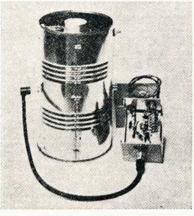



Fig. 1.—Schematic diagram of preamp. for 2 metre f.m. Resistors are ½w., and capacitors are 600v. disc ceramics. Coil L is wound with 14 gauge wire and has 5½ turns, 5/16 inch inside diameter, spaced the diameter of the wire. The output tap is 1½ turns up from the cold end.

Our pre-amp. makes use of one of the family of new n.p.n. silicon planar passivated transistors designed for small signal amplification at v.h.f. These are packaged in the new case-less epoxy encapsulated form and are manufactured almost completely by automation. The result is that here we have available, across the counter, a high gain v.h.f. transistor for less than $1. While several different types are available from different manufacturers, we used the GE type 16L64. This transistor has a gain-bandwidth product of 350 Mc. and a maximum frequency of oscillation of 650 Mc., both at 10 volts and 10 mA.



Pre-amp. for 2 metre f.m., shown with external high-Q co-axial cavity re-entrant filter, necessary in high density areas.

## THE CIRCUIT

Fig. 1 shows the schematic diagram of our transistor pre-amp. As you can see, a minimum number of components are used; two resistors, three capacitors, and the LC output circuit. The circuit configuration is that of the grounded-emitter type. The base input circuit is at a sufficiently low impedance so that it may be directly fed from a 52 ohm co-axial cable.

Now, before too many eyebrows are lifted at the absence of a tuned input circuit, let us say that we fully realise that in some areas of high density commercial two-way radio operation, intermodulation (mixing) could occur. If you have this problem, the solution is simple; add an external co-axial cavity re-entrant filter.[2] Just in case you don't have the referenced issue of "CQ", Fig. 2 shows its constructional details. (We made a slight modification to give a better match to the transistor: Instead of using an output link we tapped up 3 inches on the inner pipe.) All you need to build it in 15 minutes, besides the tuning capacitors and phone jacks, is a large size tomato juice can and a short piece of Reynolds do-it-yourself aluminium tubing, item 10. The tubing can be fastened to the bottom of the can by either an item 50 flange or by a sawed-in-half tubing slicer, item 90. If you like, or if the QRM is exceptionally strong, you can solder the cover back on the can. (We didn't find it necessary, besides visitors can look inside the can if you don't.)

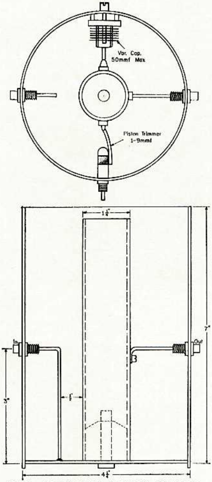



Fig. 2.—Co-axial cavity re-entrant filter mechanical details. The "in" terminal connects to the receiver fitting on the antenna relay, while the "out" terminal connects to the "in" fitting on the pre-amp. RG-58/U is recommended, each cable cut to ¼-wavelength, about 13 inches. (The same length cable should be used to connect the "out" fitting on the pre-amp. to the "ant" fitting on the receiver.)

## CONSTRUCTION

Our 2 metre pre-amp. is built into a 2¾" x 2⅛" x 1⅝" Premier box, number PMC-1000. Actually, the pre-amp. itself is built on a 2½" x 1⅞" scrap piece of copper sided printed circuit board, about 1/16 inch thick. Fig. 3 shows exactly where the holes should be drilled. The board is stood-off from the bottom of the box by a pair of ⅜" high tapped metal pillars.

The co-axial cable input and output connectors are Switchcraft No. 3501FP phono connectors. (Down with the eyebrows—such phono connectors are stock equipment on chassis of Motorola, G.E., and other commercial mobile f.m. gear.) These are mounted so that their ground lugs may be soldered directly to the copper surface of the board. The transistor is mounted upside down, supported on its own leads, with the

(Continued on Page 6)

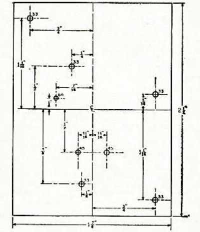


Fig. 3.—Drilling details on the circuit board chassis. The board is 1/16 inch thick and preferably with copper on both sides. If just one side is copper, drill as shown from the copper side. The numbers by the side of each hole indicate the drill gauge.

* Reprinted from "CQ," Sept. 1965.

[1] Kretzman, B., "A New VHF Operation: FM," "CQ," August 1963, p. 74.

[2] Schlesinger, "Cavity TVI Filter," "CQ," July 1954, p. 14.

# *TELEPERSONALITY*. . .*

# GEORGE JACOBS

AT recent major I.T.U. radio conferences, a top spokesman in the United States delegation on international broadcasting questions has been a friendly soft-spoken giant with a permanent fund of goodwill and as fierce a sense of dedication as any man in radio.

George Jacob's devotion to radio started in his earliest years. Born in New York forty years ago, he was only three when his father, an industrial engineer, called for the seemingly precocious youngster at school one day to show him a radio transmitter: he can still see the blue light, he says, as if it had all happened yesterday. Two years later, his father built a superheterodyne set. One evening they got Canada on it. "We caught Canada, son, do you hear?" cried the excited parent clapping the earphones over his son's ears. "That's Toronto there!" After that there was no looking back.

Growing up, George Jacobs worked for a spell as a broadcasting technician in New York and a radar navigator during World War II. He obtained a Bachelor's Degree in Electrical Engineering from New York's Pratt Institute and joined the engineering staff in the Broadcasting Service of the United States Information Agency. In 1953, at the early age of twenty-nine, he was promoted Chief of the Service's Central Frequency Division, which is the position he still holds today.

But his professional and international responsibilities by no means exhaust the time and interest he lavishes on his subject. Recently he was asked to list his main non-professional interests. "Radio, radio, radio," he said.

Specifically, this means the time and energy to obtain a Master of Science Degree in Electrical Engineering from the University of Maryland in 1960. It means senior membership in the Institute of Electrical and Electronics Engineers. Above all, it means Amateur Radio and writing about radio.

In the last thirteen years, George Jacobs has published more than two hundred and fifty technical articles in various journals and periodicals (including six in the "Telecommunication Journal"), which is an average of two articles a month. No cause has been more nobly served by the indefatigable author than that of Amateur Radio. Himself among the most active of that valiant esoteric brotherhood who glory in the name of "Hams," it was largely due to his persuasive prose in his space communications column in "CQ Magazine" that the necessary support was obtained for the launching of the Amateurs' own series of satellites —the famous Oscars.

At I.T.U. conferences he has been steadily making his mark. The United States delegation's spokesman at the 1959 Radio Conference for the high frequency broadcasting service, he played an important part in the drafting of Article 10 of the Radio Regulations. At the C.C.I.R. Xth Plenary Assembly in 1963, he was chairman of a sub-group on Space Broadcasting. He personally feels strongly about the work of the Union—"in the long run the most efficient means of communication will come about through international coordination through the I.T.U."

His success at conferences comes about through qualities not only of head but of heart. He is eminently and effortlessly well liked. Plodding purposefully on his rounds of delegates with a faint self-deprecatory grin on his face, he generates goodwill at his mere approach. His gentle manner and generous bulk seem to be intimating that the world is after all a very agreeable place—which, if it were full of people like George Jacobs, it would be. He likes to say pleasant things and hear other people saying them. He would not know how to be pompous if he tried.

George Jacobs is married with two daughters (one of whom has apparently developed a marked preference for telephony as a form of telecommunications). These, however, are not the only occupants of his home just outside Washington. There is also his Amateur set, with the call-sign W3ASK. Radio Amateurs often use their own imaginations when it comes to identifying the letters of their call-signs. In his case, there could be no better identification for the last three than A for Action, S for Sincerity, K for Kindness.

—C.M.

* Reprinted from "Telecommunication Journal," Vol. 31, No. 11.

## PRE-AMP. FOR 2 MX F.M.

(Continued from Page 5)

emitter wire soldered directly to the board. Don't forget to use a pair of pliers as a heat sink when you solder in the transistor.

The tuned output circuit uses a readily available miniature air trimmer, the E. F. Johnson No. 189-4. This low loss capacitor is soldered to the copper faced body by means of the two tabs provided, but raised above the board by about one-eighth inch by washers. A 4-40 bakelite stud terminal is mounted at the cold or rotor end to serve as a coil terminal. The hot end of the coil, which is wound with 14 gauge wire, connects directly to the stator terminal of the capacitor, as does the collector lead of the transistor. Another bakelite stud terminal is mounted so as to provide a tie point for the base lead of the transistor, the 100K resistor, and the 0.001 disc capacitor which connects to the input co-ax. connector.

### THE TWO-SET COUPLER

This pre-amp. may easily be modified to permit the feeding of two receivers. The only additional parts required are another No. 3501FP phono connector and two 22 ohm ½w. resistors. Simply mount the second connector next to the original output connector and feed the centre of each connector through its own resistor from the coupling capacitor. Fig. 4 shows the schematic diagram of the modified output circuit. The purpose of the resistors is to isolate the tuned input circuits of each receiver from each other, so that there is no interaction in tuning.

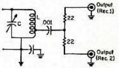



Fig. 4.—Circuit modifications for use of the pre-amp. as a two-set coupler.

### PERFORMANCE

This extremely simple-to-build 2 mx pre-amp. is not the least bit unstable. We even tried a coil and capacitor tuned input circuit, temporarily mounted inside the box, and it showed no evidence or inclination to take off. The applied voltage was 14.5 positive, and the current drawn was 4.9 mA. Using a Measurements Model 80 signal generator, fed to the pre-amp. through a 50 ohm pad, we found that the actual gain, at 147 Mc., was in the order of 10 db. Several such pre-amps. were constructed, and this gain figure was found to be fairly uniform. (Using the 20 db. quieting method.)

The outboard co-axial cavity filter, when used, adds about 0.6 db. of loss, relatively insignificant. The use of this high-Q filter does, however, increase the "front end" selectivity of a receiving system significantly. With the high quality f.m. receivers of the Motorola 80D, use of this filter makes possible the operation of in-band repeaters, or in-band duplex operation. (The latter is very unpopular in high density areas!)

# AMATEUR RADIO

## GEORGE JACOBS, W3ASK

WITH twenty years of professional experience in telecommunications, mainly with the broadcast service, one might question why I am writing a Centenary Year article on the subject of "Amateur" Radio.

The word "Amateur" is often associated with the words as "beginner," "non-professional," or "unskilful." In the case of Amateur Radio, such interpretations are unfortunate, since they are far from the truth. The very nature of Amateur Radio is such that right from the beginning it has not only kept pace with the development of other radio services, but it has often been well in the vanguard. Actually "Amateur," in the radio sense, simply denotes lack of pecuniary interest, but not a lack of technical competence. The great contributions of Amateur Radio to technology and humanity are well established.

Amateur Radio has been a part of me for almost as long as I can remember. I have been licensed since 1941 and presently hold the call sign W3ASK. I credit Amateur Radio for first introducing me to the wonders of radio communication and for kindling my enthusiasm to pursue this field professionally. Through the years Amateur Radio has brought me friendships throughout the world, friendships that vault political, social and economic barriers, and are as fraternal, warm and sincere as any I have made in my lifetime. Amateur Radio is not only a radio service, but it is also a spirit, indeed, almost a way of life. I am indeed grateful for this opportunity to write briefly about it.

The Radio Regulations, Geneva, 1959, define the Amateur Service as follows:—

"A service of self-training, intercommunication and technical investigations carried on by Amateurs, that is, by duly authorised persons interested in radio technique solely with a personal aim and without pecuniary interest."

How did Amateur Radio begin? In the latter years of the 19th century there already existed a keen interest in a new marvel—electricity. Amateur experimenters, mainly in Europe and North America, were making small electro-magnets, motors, dry cells, static machines, erecting neighbourhood telegraph lines and building numerous other experimental electrical devices.

It was not until the end of 1901, however, that an event took place that fired the imagination of these experimenters still further—Marconi's bridging of the Atlantic with radio signals. The press of the world was filled with jubiliation, disbelief and triumph at this accomplishment. "Wireless" was on everyone's tongue. Large numbers of amateur electrical experimenters

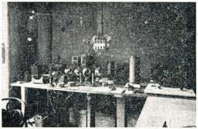
> Last year the International Telecommunication Union celebrated its 100th birthday. To mark the occasion, the Editor of the "Telecommunication Journal," the official publication of the I.T.U., invited leading telecommunication officials throughout the world to write a series of articles on "Telecommunications, Yesterday, Today and Tomorrow." George Jacobs, W3ASK, was invited to write about the Amateur Radio Service. The following is a reprint of the original article as it appeared in the July 1965 issue of the journal.

turned away from their electro-magnets, motors and dry cells and began to explore the realm of radio communications. Amateur Radio was born!

During the first decade of this century, Amateur experimentation with radio was a difficult task, since technical and constructional material were scarce. A typical Amateur station of those days consisted of an induction coil, a condenser and a spark gap for transmitting and a simple coherer-decoherer or galena crystal, and a single head telephone for receiving. It was not unusual for early Radio Amateurs to communicate with each other using such equipment, over distances of 80 to 160 kilometres.

International regulations were non-existent at the time, since there was no radio law. Everyone had an equal right to the air, and during the first decade of this century the number of Amateur Radio stations on the air greatly exceeded the number of coastal and ship stations—a fact that should qualify Amateur Radio as the "dean" of the radio services.


George Jacobs, W3ASK, CQ's Radio Propagation and Space Communications Editor, shown at his own station in Silver Spring, Maryland. George's main interest is in handling emergency overseas traffic, and you can find him doing this just about every morning, or week-end afternoons on 15 or 20 metres.



Shack of the early days.

### PIONEER SPIRIT

From the very beginning, the Radio Amateur has been a pioneer. He "tinkers" and "toys," he "tries this" and then "tries that," always with the purpose of extending the range of communication or increasing operator efficiency.

Space limitations will not permit a detailed review of all the contributions made by the Amateur Radio service to the field of radio communications. Radio Amateurs were, however, the first to demonstrate the enormous usefulness of short waves, and they also pioneered the use of v.h.f. and u.h.f. regions of the radio spectrum. They were among the first to devise practical transmitting and receiving equipment using vacuum tubes, and they have contributed much to radio propagation research. Amateur Radio was the first service to completely outlaw spark transmissions and among the first to utilise c.w. Amateurs have also led the field in devising techniques to reduce interference so that greater use can be made of the radio spectrum. Suffice to say that since its birth, Amateur Radio has been a clearing house for ideas, and a "proving ground" for almost every major technical and operational development in the field of radio communications.

### EMERGENCY WORK

From the early days Amateur Radio has earned an outstanding reputation for providing communications during emergencies, when other means of communication fail or are overloaded. The annals of Amateur Radio contain an impressive record of countless emergencies, natural catastrophies, epidemics, etc., in which Radio Amateurs, with skill and devotion, and frequently at personal sacrifice, have served their communities and brought speedy relief to victims of suffering and need. Many thousands of lives, an untold amount of human misery and millions of dollars in property have been saved by their efforts. Radio Amateurs consider such assistance not a duty, but an opportunity to serve humanity.

### TRAINING GROUND

Amateur Radio, with the world as its classroom, is a great training school for the entire field of electronics. What

* Reprinted from "CQ," February 1966.

better way is there to learn about radio communications, than by participating in it? Through Amateur Radio one can train oneself and acquire skill and practical experience in a complex field. From the ranks of Amateur Radio over the years has come an army of trained technicians, operators and instructors.

Amateur Radio also provides a spack that can set the inquisitive mind afire. Many of the world's leading telecommunication officials and communication engineers can trace their first interest in these fields to participation in Amateur Radio. Many of the young Radio Amateurs of today will be the professional engineers and scientists of tomorrow.

**SPACE EXPLORATION**

Space exploration opened a new era for Amateur Radio, as indeed it did for all communication services. Amateur Radio entered the space age on December 12, 1961, with the successful launching of the Oscar I satellite (Orbiting Satellite Carrying Amateur Radio). Built entirely by Radio Amateurs, and containing a beacon transmitter operating in the 2 metre Amateur band, observers in thirty countries tracked the satellite as it orbited for a three-week period. This was followed by the successful launching of a second Oscar beacon satellite in June, 1962. Now, almost at this moment, Radio Amateurs are standing by throughout the world awaiting the imminent launch of Oscar III[1]. This will be an active communication satellite capable of receiving and relaying signals in a portion of the 2-metre band.

[1]Since this article was written Oscar III. was successfully launched and more than 200 two-way contacts were made through the satellite during the period March 9-24, 1965. Oscar IV, another active communications satellite, was launched on December 21, 1965, and is now in operation, although somewhat erratically.

**FREQUENCY CONGESTION**

The Amateur service, perhaps more so than any other radio service, is feeling the pinch caused by the congestion in the short-wave bands. There are more stations operating per kilocycle in the Amateur bands than in those allocated to other services. To make efficient operation possible under such conditions, over the years the Amateur service has adhered to a technical development programme stressing the use of narrow band emission techniques, reductions in received bandwidth, use of directional antennae and transferring operations to the v.h.f. and u.h.f. bands wherever this is technically possible. Many of the techniques developed by the Amateur service to reduce congestion have set the example for other services.

Amateur Radio is dynamic and its future looks even more exciting than its past. From its beginning at the turn of the century, Amateur Radio has grown to where there are now approximately 400,000 duly authorised persons participating in this service. Radio Amateurs are now located in nearly every country of the world, with the greatest concentration in North America and Europe. It is estimated that the number will rise to above 650,000 mark by the end of this decade.

In the years ahead, Amateur Radio looks toward increased technical assistance to "new and developing countries." Its long history shows that Radio Amateurs comprise a reservoir of trained operating and technical personnel. By encouraging and assisting in the development of Amateur Radio in these countries it is hoped to provide a source of trained communication experts who would be able to operate the various radio services of the countries concerned.

**THE SPIRIT OF AMATEUR RADIO**

Not all the 400,000 Radio Amateurs in the world today are interested solely in technical matters. Indeed, a large number participate in Amateur Radio simply for the sheer enjoyment and pleasure of speaking to each other by voice, c.w., teletype, or whatever type of emission might be used. Amateurs, as a rule, chat freely with each other about their equipment, their families, their work and their leisure interests. Radio waves do not recognise frontiers or political, economic or social barriers. Personal radio contacts between Radio Amateurs of different origins, nationalities and cultures, foster—more than one may realise—a spirit of union and friendship, of peace and understanding. This aura of commonness which unites Radio Amateurs throughout the world is a bright symbol of hope for the future. This is the real spirit of Amateur Radio and one that sets it apart from all other radio services.

Amateur Radio doesn't measure its success by volume of traffic, gross revenue, or audience—but simply by how well it has served humanity.

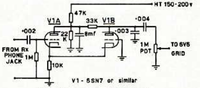
☆

# Audio Clipper/Limiter for C.w./Phone Reception

The glass arm is common throughout Hamdom. Anyone it seems can develop functional disorders peculiar to his occupation.

Well, mine's a hyper-sensitive ear. After 30 years of trying to work S4 DX through the S9 rough something must give.

The following clipper/limiter is an oft-used, conventional but effective circuit that will reduce the pain and strain to a minimum. QRN, Tx make and break, or other shock noises, QSB, etc., all will be considerably reduced. Selectivity will appear to improve and the S4 signals become S6. The effect is like putting the "shockers" back on the old car, smooth, boy, smooth.



CLIPPER/LIMITER CW/PHONE

The audio level is set at comfortable ear strength and no signal or noise can rise above it. Input to the limiter is simply from the fone jack of the receiver. The limiter output is fed into a conventional 6V6 type a.f. amp.

For better results there's an optimum setting of both limiter and Rx a.f. gain. Firstly, with the limiter gain well retarded, set the Rx a.f. gain at more level than the limiter can handle. This is indicated by a very "woofy" sound on all signals and noise. Now slowly retard the Rx a.f. gain, keeping the limiter at comfortable ear strength by slowly increasing the latter's gain control, until the woofines has all but disappeared—and that's it. The cacophany is now silk in the ears. Condenser and resistance values are broad in tolerance. —VK4SS.

# VHF

Sub-Editor: LEN POYNTER, VK3ZGP
14 Esther Court, Fawkner, N.15, Vic.

We all know where the flies go in winter, but where, oh where, did the DX go this season? Probably will remain the best-kept secret of all time. No doubt the experts will have an answer. Just when everyone was getting set the band went dead on 6 and many carefully laid plans went for nought. However, two more than rewarded the efforts of all those who were on deck when the VK2-ZL stranglehold was at last broken.

With openings across the Tasman on Nov. 7, Dec. 8, 9, plus VK3, VK5 13th, VK3, 5 and 7 15th, 23rd and Jan. 2, left many VK2's with three out of four call areas worked in ZL and I guess some ZL's need only VK4, 6, 8 for VK WAS on 2. On 13th, 5ZHJ heard the VK6 beacon, so it could well have been possible to make ZL-VK6 and take the world record. Anyway, here's hoping for bigger and better things next time.

It would appear to have done something for 2 that the JA's have done for 6. With the advent of the Channel 0's many who have never been on 2 are migrating there and others who had 2-metre gear are using it, thus popularising this somewhat forgotten band. Advances in gear and techniques are catching on and goals are being reached when we thought they were not possible.

Oscar IV. unfortunately did not reach expectations and has been a disappointment to many. However, good signals have been copied in many areas and rare signals heard. Perhaps once again better luck next time.

The holiday period saw quite a few interstate visitors to Melbourne. Met VK4ZRH and worked a number of VK5 Amateurs mobile in Melbourne. VK7ZAQ was also a visitor who called.

Unfortunately we have had no reports from VK6 to show how conditions were over there this season. However, we can only conclude that the results were similar to the Eastern States. Hope to see them back with us again next month. Thanks to Bob 4ZRG for his notes from Townsville and hope to hear from you again Bob. Please keep the news coming in to reach me by the 2nd of each month.

73's, VK3ZGP.

### NEW SOUTH WALES

The New Year Field Day week-end was fairly successful. While not the best for DX, over 30 logs were returned. It is expected that a similar event is to be planned for the Queen's Birthday week-end in June.

The loss of 432 Mcs. for one month affected some of the field stations in the contest. Some long-distance attempts had been planned. VK2ZHH is currently working with t.v. on 435 Mcs. In early February he had a raster signal on air with about 5 watts.

Group elections occur next month. The main mobile events are the 6 and 2 metre fox hunts. There is an upsurge of 2 and 6 metre a.m. mobiles during lunch hours and after work.

From late November to early January there were between 80 and 100 2-way 2-metre contacts between VK and ZL. It appears that David VK2ZVW was the only station to work all four ZL districts. de 2ZTM.

### QUEENSLAND

**6 Mx:** During the Xmas period many of the northern VK4's were putting good signals into Brisbane. From Mt. Isa 4AK and 4ZCB were working everyone. David 4AK uses s.s.b. with carrier. As many stations do not have a b.f.o., the request to insert some carrier was common.

Bob 4ZRG from Townsville made Brisbane many times with his 6146.

Short skip (300 miles) enabled a contact to be made with Lance 4ZAZ in Rockhampton. This meant of course that 2 metres was open to Townsville. Are there any 2-metre operators in Townsville? Closer to home was John 4PU. John worked Brisbane from his mobile—signals were very good—such is 6 metres.

Around January 21, 22, 23 New Zealand television was overload strength in the afternoons. However, no Amateur stations, VK or ZL, were heard (even locally).

On 2 metres the story hasn't changed very much. The same regular group operates with Mick 4ZAA not as frequently on the air as he used to be. Frank 4ZAS has re-appeared on 2.

Bill 4ZBD has built a 6CW4 2 metre conv. with excellent results. I have a new converter, too, two GE7077's; 417A; 6U8; 6CW4. It does a fairly good job. John 4PU and Colin 4ZMC have been working into Brisbane while John 4ZJB has been working northern VK2 with his large number of 10 element yagis.

It is now expected that 432 Mcs. contacts will soon be made here in Brisbane. Most gear is already half completed—keep your eye on this band. Agreed frequencies are 432-436.

73's from the VK4 v.h.f. group. VK4ZPL.

### TOWNSVILLE

Local activity has improved with Graham VK4ZGR arriving from Rockhampton to take up a new position. At present he is operating mobile but hopes to have a 50 w. rig within a few weeks. Bill VK4ZBE was in Townsville for a few days and I was able to catch up on news from Rockhampton. VK4RO in Ayr and VK4ZRG haev made contact on 6 metres via a path of some 40 miles. Does not sound impressive, but we do have a 4000-ft. mountain right between us. Signals run 5-7, so we now have another local QTH to work into. VK4ZMI and VK4ZRG are at present working on 432 Mcs. gear for operation during the winter, when 6 metre DX is poor. VK4ZRG hopes to have a 4CX250B in service soon on 6 metres running 150 w. VK4ZRG.

### SOUTH AUSTRALIA

Despite the dullest DX season for many years the v.h.f. fraternity within the confines of VK5 are still very active perhaps in contemplation of a belated season.

The most encouraging news available at the present time is that VK5VF, the VK5 6 and 2 metre beacons, will again be operating in the near future. However, by the time these notes are being perused by those who bother to read the v.h.f. notes, the beacons should again be opeartional.

During the period December 26 to January 26 rare, short and extremely sporadic band openings have been recorded to VK2, 4, 6 and 7, with Doug 8KK at times providing the strongest signal heard all season. Comparing these openings to previous years has yielded the thought that the '65-66 DX season has by far been the worst experienced in VK5 for many years.

The greatest boost and publicity towards 144 Mcs. has been the recent VK2-ZL contacts. On December 9 at 0843 G.M.T. Hughie 5BC worked Graham ZL3AAD, with signals R5 S8 both ways. Since working ZL3AAD Hughie has again been active and has increased his tally of ZL's on 2 metres to a reported figure of 11 contacts. Mick 5ZDR received a bonus Christmas present by working VK7AH on 25/12/65 on 2 metres with signals R5 S5 both ways. Mick now has VK2, 3, 4, 5 and 7 toward his WAS 2 metres. During the same period that 5BC was working ZL3AAD and the VK2's were also working into ZL. Colin 5ZHJ copied Les 2ZBJ calling "CQ DX ZL 2 metres." Although Les had his beam side on to VK5 signals were R5 S5 and excellent copy.

Later a beat signal was copied from 2ZEV by Colin and had the use of c.w. been available a contact may have been possible.

On 13/12/65 Colin 5ZKR at Mt. Gambier, following on the heels of 5BC, worked John ZL3AAU on 2 metres. Signals were R5 S5 both ways. Although the distance is comparatively shorter the achievement is still most meritorious. The need for operators to back up beacons became evident on 12th December, when Colin 5ZHJ copied the VK6 2 metre beacon at R5 S3.

Although many frantic CQ's were made, the lack of signals except the beacon from VK6 was to say in the least, upsetting. However, with the VK5 beacon being "stoked" up again, the same frustrating situation could prevail upon a VK6 operator. Here's hoping it does not.

Excellent signals from Herb 3NN (180 miles), Tony 5ZAI, Colin 5ZKR and Chris 5ZFA (300 miles) have been appreciated by many Adelaide stations during the last month. An occasional contact into Ballarat, etc., has also been reported. With the succulent taste of 2 metre DX still in their mouths many VK5 are planning larger beams, power, etc., to provide for brighter things to come. With increasing band population on 2 metres throughout Australia this band could become the most interesting and rewarding for those who are genuinely interested in experimenting, which is what Amateur Radio was primarily intended for anyhow. 73's, Colin 5ZHJ.

### TASMANIA

Six metres looked set for a bumper season with frequent openings from early December until 23rd generally around 9000 hrs. and again at 1700 hrs. E.A.S.T. Most common were VK2, VK5 and, to a lesser extent, VK4. Three openings to Melbourne brightened our days and an occasional ZL, VK6 or VK8 dropped in. Channel 0 beacons at Wagga and Brisbane proved useful. A sudden closure left the only worthwhile openings on 31st December and 2nd, 16th and 22nd January. An interesting 365 ml. 6 mx QSO took place on 8th January between 7RL, Mt. Barrow and 3ZER. This would seem to be extended groundwave.

Peter 7PF's exploits using Oscar IV. will probably be recorded elsewhere; W6's amongst his calls heard and the "makings" of a ZL QSO.

An important first was a 2 mx contact between 7ZAH Ulverstone, and 5ZDR in Adelaide. This was arranged as a Christmas present for Mick on December 25.

One of the best temperature inversions during early January extended from the 6th to 11th, providing northern stations with 2 mx VK3 and VK5 contacts. On 8th (?) 7DK heard 2ZBW. Col 7LZ had 432 Mcs. contacts with 3ZER and 7RL attained one way contact.

Winston 7ZAP spent much time re-writing his 2 mx record book. His first was on 13th December around 1750 when he worked ZL3UM, ZL3AR, ZL3TAT and ZL3AAU. Winston has a carefully selected QTH at Mt. Nelson, a higher suburb of Hobart. His exploits continued on 8th January, when he contacted 7ZAH/M at Table Cape near Wynyard (150 miles) and following this 3ZDM. Next morning 3ZDM was 5/9 in this part of Hobart. On 8th January 3ZNC was worked and on the 9th and 10th 3ALZ was heard and called for 2 hours while in contact with Launceston stations, but no contact resulted. 7ZAP continues to participate in skeds with 3ZDM at 0700 and 2130 daily.

Winston's activities confirms that the extra 100 miles from VK3 requires a suitable inversion layer between Hobart and Launceston. Channel 9 Launceston provides a good indicator as it is generally good copy in Hobart but during these times was subject to quite deep fade. Interference from GTV9 is noticeable, and on 22nd January TCN9 and ATN7 were identified by Winston. The only Amateur signal heard was 3ZDM at 0815.

Stations were operating on Mt. Barrow and Mt. Wellington during the VK2 Field Day but nothing heard. 7ZAO.

## W.I.A. D.X.C.C.

Listed below are the highest twelve members in each section. New members and those whose totals have been amended will also be shown.

### PHONE

| Call | Cer. No. | C'nt-ries | Call | Cer. No. | C'nt-ries |
|---|---|---|---|---|---|
| VK3AHO | 51 | 321 | VK2JZ | 61 | 254 |
| VK5MS | 24 | 320 | VK2ADE | 65 | 231 |
| VK6RU | 2 | 313 | VK3TL | 62 | 225 |
| VK5AB | 45 | 312 | VK4HR | 12 | 223 |
| VK6MK | 43 | 307 | VK2AAK | 58 | 214 |
| VK4FJ | 21 | 283 | VK6KW | 4 | 211 |

### C.W.

| Call | Cer. No. | C'nt-ries | Call | Cer. No. | C'nt-ries |
|---|---|---|---|---|---|
| VK3KB | 10 | 339 | VK2AGH | 71 | 284 |
| VK3CX | 26 | 312 | VK3AHQ | 79 | 281 |
| VK2QL | 5 | 308 | VK2EO | 2 | 279 |
| VK4FJ | 29 | 300 | VK6RU | 18 | 265 |
| VK2ADE | 81 | 298 | VK3ARX | 66 | 259 |
| VK3NC | 19 | 286 | VK3XB | 75 | 247 |

Amendment:
VK3TL 78 225

### OPEN

| Call | Cer. No. | C'nt-ries | Call | Cer. No. | C'nt-ries |
|---|---|---|---|---|---|
| VK2ADE | 28 | 322 | VK3NC | 77 | 287 |
| VK6RU | 8 | 320 | VK2VN | 18 | 274 |
| VK2AGH | 83 | 316 | VK3JA | 43 | 271 |
| VK6MK | 74 | 309 | VK4HR | 7 | 264 |
| VK4FJ | 32 | 308 | VK3TL | 85 | 248 |
| VK2ACX | 6 | 300 | VK2APK | 82 | 243 |

New Members:

| | | | | | |
|---|---|---|---|---|---|
| VK9TL | 99 | 101 | VK6EZ | 100 | 104 |

# YRC

For the Y.R.S. the beginning of each school year has great importance because the great majority of clubs are in schools. Loss of the interested teacher is sometimes a setback but year after year the clubs have steadily increased and from all signs 1966 will follow the same pattern—this shows the basic soundness of our efforts. I have only one complaint—the usual one of a correspondent who would like to hear all the news from everywhere. Perhaps if PS twisted an arm in VK5 and my other three readers told a few sob stories, life would be easier. At the moment, however, I'm well away with loads of news from VK2, 3, 6 and 7.

The VK7 Y.R.S. Supervisor, Mike VK7MC, has been sighted round Sydney (all you interesting people should remember your national capital is worth a visit) but my news of VK7 came from the antenna. At that time there were two active Y.R.C.'s, one at Taroona High (Hobart), where three interested teachers have 50 members, and the other at Latrobe High with 100 members, assistance being given here by Reg. VK7ZAO. VK7 Council supports the Y.R.S. and it is expected other clubs will open this year in Huon Valley and the N.W. Coast.

VK3 goes from strength to strength. Three clubs at Macleod, Geelong East Tech., and Essendon Grammar, each have had 11 members pass Elementary. Peter Cole at Camberwell Grammar is the first non-clubber to pass Elementary. Teachers' Training Colleges are being wooed with the right kind of information and help—a remarkably important field this. A generous donation from Fairchild (Aust.) Pty. Ltd., of Silicon N.P.N. Transistors, will greatly assist clubs in 1966. Dr. Warwicke has transferred from St. Anne's C.E.G.S. (Sale) but Rod 3UG will lead the club, so Dr. Warwicke's work will carry on. Chris Hall, club instructor at Warrnambool Tech., reports that the club has call sign 3AWG—equipment includes Heathkit Cheyenne Tx and Heathkit HR20 Rx. Chris would like skeds—would other Y.R.C.'s please oblige? Bill Allen's Gowrie Park Primary School Club had a good write-up in the A.P.O. (Post Office) magazine, circulation 20,000.

VK6 are not next door but Laurie VK6EA is supervisor (teacher at Wesley College). Rev. Brother Morgan VK6RT has a club at C.B.C., Leederville, with call sign VK6LV. The nuns are following the example of St. Anne's—Sister Joan of Sacred Heart College, Highgate, is studying for A.O.C.P., so there should be a station at Highgate this year.

VK2 is alive as usual. That excellent idea—Camp Technology—had another successful 9-day session in the holiday house at Mt. Victoria, where modern instruments and components cater for an immense range of projects and experiments in Electronics and Photography, while outdoor activities such as games, walks and swimming round off the holiday. This year, 10 boys successfully completed Elementary. At Westlakes, six boys gained Elementary, and the club (as well as Y.R.S.) had useful publicity in "Interradio," the annual journal of the International Radio Club of Geneva. Ian O'Toole, a keen Westlakes member, is sowing seeds at Narara Public School—a rival for Gowrie Park? Bruce Lewis of Kingsgrove North High and Greg. Dunne of Kingsgrove High have been successful in entrance exams. and interviews for Technicians-in-Training at D.C.A. A radio instructor is needed for Bankstown Police Boys' Club for one night a week. Kiama High have nine Elementary passes, Birrong Boys three, Waverley C.B.C. 12 (with five honours). Overseas Telecommunication Commission Prizes (for Elementary passes over 95%) went to Ross Steele (Lyneham High), David Truskett (Kiama), and Steven Ford (Kingsgrove North). First Y.R.S. Navy apprentice is Waren Donald, formerly secretary of Punchbowl Boys' High—his Interview Board were pleased and impressed by the Y.R.S. certificates which Warren presented as evidence of his established interest and proficiency in Radio and Electronics. Mr. John Westmore, of Roselands Book Centre, has generously donated $10 value of Electronics books. First Scouts in VK2 to pass Elementary are Peter Scotland, Paul Westcott and Greg. Pitman, of Strathfield. Cheers. Ken 1KM.

# *Publications Committee Reports That . . .*

Inwards correspondence from VK's: 6JW, 4SS, 3BP, 3UG and W. E. Olsen, Hong Kong Amateur Radio Transmitting Society, plus a technical article from D. Priestly.

The Committee finally have arranged for regular issue of prediction charts in "A.R.," and advises that these will take the form of bar charts showing the times during which the Amateur bands should be usable for the following paths: Barbados, Bombay, Cairo, Johannesburg, London, Montreal, Nairobi, Rio de Janeiro, San Francisco, Tokyo, West Africa and Wilkes. All charts will be based upon Canberra as it was considered that such a position suited the majority of Amateurs, rather than taking Melbourne as the centre. A more detailed explanation will be given in next month's "A.R." when these charts will be published.

Many readers are commenting upon the fact that technical articles are not being featured in "A.R." It must be remembered that we rely upon voluntary contributions as we cannot afford paid technical staff, nor currently can we see our way clear to pay contributors, but steps are being taken to offer greater financial inducement to readers to forward articles. All "A.R." staff are voluntary unpaid workers, as are members of all W.I.A. committees, and it is a tribute to the Amateurs that so much is actually accomplished by these active members. Your Committee would like to carry out many plans for the magazine but they can only spend such money as is available to them from the Victorian Division funds, until such time as this loaned money is repaid by advertisers and other Divisions. Just like you, we must live within our income, even though it doubled when expressed in dollars.

The Call Book is nearing completion and should be issued early in March, so please do not ask for copies from your Division or bookseller until we announce the exact release date. Arrangements are being made for an enlarged future issue which will be published at a definite date and issued as promised. All Amateurs are thanked for having been patient and awaiting the release of the '65/66 edition, the delay being caused by conditions outside of the control of the W.I.A.

VK5 State Co-ordinator for Y.R.S. presenting electric soldering iron to Gary McDonald, Port Pirie Club, for most improved first year student 1965. Bruce Johnston received prize for being youngest in S.A. to achieve Elementary Certificate.

## YL NEWS

Hebe VK2AOK was seen recently in a five-minute X sexment on Channel 2 Week-end Magazine. She had several friends in the shack with her who have sons and husbands in the Antarctic while Hebe conducted a QSO with the men at Mawson. There were the usual shots of the antenna, the shack, etc., combined with views of the Antarctic with voices in the background when the ladies were not on the screen. It was very well done and I understand took nearly four hours at Hebe's QTH for the photography.

We would like to congratulate Mavis VK3KS for having become the sixth YL in the world to gain the WPX on c.w. Mona, VK2AXS.

# CONTEST NEWS

### REMEMBRANCE DAY CONTEST V.H.F. PARTICIPATION

As this present Contest Committee is desirous of far greater activity from the operators of V.H.F./U.H.F. Stations, we are asking for ideas and suitable material from which to formulate items to be presented at the next Federal Convention.

Your assistance would perhaps help to form a Remembrance Day Contest in which more v.h.f./u.h.f. operators could take part and help their state win the Contest.

All correspondence will be read by the committee and your contribution towards greater v.h.f. participation will be appreciated.

[Write to Federal Contest Manager, Neil Penfold, VK6ZDK, 55 Moulden Ave., Mt. Yokine, W.A.—Editor.]

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### R.D. CORRECTIONS AND ADDITIONS

**Award Winners:**
Receiving: L3100/P .... 934

**N.S.W. C.W. Section:**
Delete VK2GT .... 208

**S.A. Open Section:**
Delete VK5WW .... 421
Add VK5WV .... 421

**Receiving Section:**
Western Australia W.I.A. L6021 .. 925
L6038 .... 853
L6034 .... 126

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### CONTEST CALENDAR

5th/6th March: N.Z.A.R.T. National Field Day. (3.5 and 7 Mcs. only.)

12th/13th March: A.R.R.L. DX Competition. Phone Section (2nd week-end).

19th/20th March: B.E.R.U.

26th/27th March: A.R.R.L. DX Competition. C.w. Section (2nd week-end).

16th/17th April: "CQ" W.W. DX S.S.B. Contest.

**Wireless Institute of Australia**
**Victorian Division**

## A.O.C.P. CLASS

commences

**MONDAY, 2nd MAY, 1966**

Theory is held on Monday evenings, and Morse and Regulations on Thursday evenings from 8 to 10 p.m.

Persons desirous of being enrolled should communicate with—

Secretary W.I.A., Victorian Division, P.O. Box 36, East Melbourne (Phone: 41-3535, 10 a.m. to 3 p.m.), or the Class Manager on either of the above evenings.

# SWL

Sub-Editor: D. GRANTLEY, WIA-L2022
Alexander Ave., Hazelbrook, N.S.W.

We would like to extend to you all our best wishes for this year and trust that it will provide much good listening for all. So far band conditions have been exceptionally good, and many of our chaps have reported new countries heard whilst the usual rash of of holiday DX-peditions have made life a little more bearable for those of us who are running out of countries heard. We look forward to a good year, and one which could see one of the "top three" on the ladder become the first official W.I.A. S.W.L. to reach the 300 heard mark.

Occasionally we have a new member join the ranks, and this month I would like to introduce to you one of the keenest S.w.l.'s I have ever contacted. Chaps meet Ernie Luff L5080, of Elizabeth Vale and late of G land. Ernie, though a newcomer to the W.I.A. is an experienced listener whose association with listening goes back to 1925 in his home country when radio was in its infancy. As I look back to the quiet pre-war Sunday mornings when VK3PA gave us so much pleasure it seems that an age has gone by, but it still is a thrill to remember the old 2v. set and the B.C.B. listening that was my main interest. To Ernie, however, the day of his greatest thrill was much earlier, in 1927 in fact, when on a similar Rx, he logged 2FC Sydney on b.c.b. in London, and has card to prove it. Now his interest is in the Amateur bands, and at the age of 71 he is an active member of the Elizabeth R.C. and climbing up the ladder. If your self-designed card is anything to go by Ern, it should get a bite or two. From all our members we would like to say welcome, and may the DX come your way thick and fast.

**DX News.** From "Monitor" I pass on the following brief items of interest. GC8HT recently in operation, QTH Guernsey. HZ1AT/8Z4 and 8Z5 cards now ready, QSL to G8KS. KG1 prefix now cancelled and replaced by OX4 and OX5 for Nth. and Sth. Greenland. VP5AR on Turks, QSL to WA8GUA. VP8HO heard recently, QTH Sth. Georgia. CR3GF loggings last October from Portuguese Guinea, QSL to Box 535, Lima, Peru. FB8WW again active from Crozet whilst FB8XX from Kerguelan. Marion Island station ZS2MI reported on 21 Mc. s.s.b., QSL to ZS1CZ. Check back over your log for WA7DYP/KH6, was on Kure Is., QSL to KH6EDY. CR8AE requests all QSL's to be sent direct with IRC's to Jaime de Guia Parella, Civil, Dili, Pt. Timor. LA5CI heard from Jan Mayen, QSL to LA1NG. Need a card from OY? Then try their QSL manager OY2J, Box 184, Torshavn, Faroe Island, and look for the club station OY6FRA.

**Commercial DX.** Two interesting publications reached this QTH recently, firstly the well-produced Newark News R.C. bulletin which is a must for those of our number who are interested in all branches of DX. If you are not familiar with the club, drop me a line to Box 222, Penrith, N.S.W., and will tell you all about it. Secondly, I have here a copy of a pamphlet and programme guide from Radio New York Worldwide, 4 West 58th St., New York 19, N.Y., U.S.A. This is a regular release and can be obtained from the station.

**Around the Shacks.** Peter Drew L6021 still pulling them in on all bands. Many cards have come to Pete including OX3JV Nth. Greenland, VS9SJF Socotra, ZL3VB Chatham Is.; and K2US at the World's Fair. Amongst the DX heard was LZ2KBA on 80, OH5NW on 15, ZL's on 10, and most of the world on 20. Alan Raftery L5065 is enjoying a feast of DX, and has just received cards from ZD5R, VK0GS, CR8BH, as well as the more common ones.

From Chas. L2001 a report on the excellent conditions prevailing on 6 metres which has given openings to all ZL districts, plus VK5, 4 and 7. Chas. has on hand a card addressed to RA 3160 C/o VK2, any claimants? L2019 Chris. Middleton-Williams, QTH 3 Veronica St., Chester Hill, is the new secretary of the VK2 group and has a difficult task in front of him.

L2283 Bob Mackintosh lives on the fringe of the Blue Mountains but is troubled by QRM. His gear is an AMR 300 fed by an inverted V for 40, and a 2 EL beam for 10 metres. Bob Mutton of VK7 uses the well-tried 3BZ with 14 and 7 Mc. dipoles running north to south. Bob sends in a comprehensive list of countries heard in recent weeks including CR6, CR9, FU8, MP4B, MP4T, UB5, UG6, VR5, XW8 and many others. He reports the W's on 3.5 Mc. at 1100z. Inward QSL's were MP4BCC, OX3JV and VK9FE. Warwick L3211 found time to log such calls as VS90, YK, UA, VQ8, CN8, FR7, ZC4, VP7, to name a few, most of which were snared between midnight and 4 a.m.

L5080, Ernie, has heard F, DU, HI8, OK1, XW8, UA6, FB8, CP6, 9M6 and MP4T to name a few. Finally the last in the mailbag was from Doug Head of South Yarra, with whom I have been in touch by tape. Doug is a member of the I.S.W.L., and between us we have made a tape on conditions here for other members of that group. A tape has also been exchanged with Bryan Prosser and the VK6 boys who are still getting their share of DX. On the home front L2022 has a wonderful time on the bands over the Christmas period, when the bands really opened to all parts of the globe. Looking back over the log I see many entries on 15 metres, whilst on the odd occasion 10 broke through. I didn't think there were any more countries to be found, but a run of good luck brought me up to the 294 mark within three days. Included in these were 4U1ITU, LA1H and ZS3E. I would like to thank the many listeners who sent Christmas greetings, many as yet unanswered, I do thank you all and trust that this year will be an excellent one for you.

**Meet the Overseas S.W.L.** It was a great honour to receive a long letter from one of the best-known listeners in the world, Le Roy Waite, of New York, U.S.A. Roy has been around for a long time, in fact at 65 he has been retired for six years after being a postman on a walking beat for 40½ years. A newcomer to the game in 1928, Roy opened his account by logging G5SW Chelmsford and PCJJ Holland on S.W.B.C. with the proverbial 2 tube regenerative Rx. For many years these bands interested him, however, in recent years the Ham bands have been his sole interest. With 298 countries confirmed and 305 heard on the A.R.R.L. list, Roy has earned his place up with the leaders. In 1951 he became editor of the Amateur section of the Newark News R.C. Bulletin, and in 1957 in addition to this task that of S.W.L. QSL bureau manager became his voluntary contribution to the listeners. Roy offered to handle cards from foreign Hams to W listeners when he discovered that they were being returned to the sender. Roy adds, "In addition to A.R.R.L. I handle cards from several foreign bureaux as well as from individual Hams. Not only does the A.R.R.L. send me all cards received for W. S.W.L.'s, but those for foreign listeners as well. The latter I send to the I.S.W.L. Bureau with the exception of VK, which are now being sent to the VK Bureau."

**DX Ladder.** The position has altered once again, and it is now Warwick Smith who throws out a challenge to Peter Drew as he draws to within 9 for the third position. An interesting situation now exists in the top three places as one point separates Eric and I in the countries heard. This will be the last publication of the ladder for three months, but keep your scores coming in just the same.

**S.W.L. DX LADDER**

| | Countries Conf. | Countries Hrd. | Zones Conf. | W States |
|---|---|---|---|---|
| E. Trebilcock | 290 | 295 | 40 | 50 |
| P. Drew | 186 | 262 | 38 | 40 |
| D. Grantley | 128 | 294 | 39 | 35 |
| W. Smith | 119 | 195 | 34 | 7 |
| A. Westcott | 106 | 159 | 34 | 11 |
| G. Earl | 101 | 167 | 33 | 18 |
| R. Kearney | 100 | 161 | 33 | 8 |
| M. Hilliard | 93 | 241 | 33 | 14 |
| C. Aberneath | 66 | 105 | 33 | 14 |
| B. Prosser | 60 | 180 | 17 | 8 |
| A. Raftery | 58 | 175 | 24 | 11 |
| E. Luff | 48 | 83 | 22 | 6 |
| R. Mutton | 36 | 88 | 23 | 10 |
| R. Mackintosh | 32 | 88 | 20 | 5 |
| D. Shepherd | 31 | 95 | — | — |
| R. Halligan | 21 | 136 | 11 | 1 |

That's it for this month chaps. Could I have your notes by the 25th of the month for future issues. 73, de Don L2022.

## SUBSCRIPTIONS DUE

**All members of the W.I.A. are reminded that annual subscriptions are now due and should be paid promptly to their Divisional Secretary. Non financial members will not receive a copy of "A.R.," and back copies may not be available upon request. To preserve continuity of your files of "A.R.," please pay your annual subscription now.**

# DX

Sub-Editor: ALAN SHAWSMITH, VK4SS
35 Whynot St., West End, Brisbane, Qld.

While 21 Mcs. has fallen away, both 7 and 14 Mcs. have remained steadily open to DX this past month. 80 mx from 0900z is usually quite good to U.S.A. during the months of February and March, if the QRN level permits. There is also a short breakthrough, at this QTH, to Europe on the S/P at 1845-1900z.

### NOTES AND NEWS

**Kamaron Island:** VS9KRV will be activated by VS9AFR Ron, VS9ARV Ray and possibly VS9ADF. Operation is expected during the first two weeks in March, using Ron's equipment on s.s.b. and c.w. Primary freqs. are 14,009 and 14,160. (LIDXA)

**South Sandwich:** LU1ZY, Domingo, on 14,070 at 0300z. Gives QTH as Pringles 837, Formgsa, Argentina, and says he is on Antarctica, but station is listed for South Sandwich. (LIDXA) There seems to be some doubt on this one—Al.

**Grand Turk:** VP5RB Bob occasionally active on 20 metre s.s.b. Heard at 400z on 14,230 recently. QSL to W4RK, Box 322, Boca Raton, Florida. (LIDXA)

**Seychelles:** VQ9TC Ted, new station on the island, running an NCX-3 to a doublet, but working on a quad. QSL to VQ9TC, Box 191, Mahe, Seychelles. (LIDXA)

**Fiji:** Fred VR2CC on s.s.b., 14,120 Kcs. at 0530z. QTH, Beachcomber Hotel, Fiji (S.W.L. C. Thohpe.)

**American Samoa:** KS6BO s.s.b., 14,200 at 0205z. (S.w.l. C. Thorpe.)

**Leichenstein:** HB0YS Henry is active on 20 mx s.s.b. QSL to HB9YS. (LIDXA)

**San Andres:** HK0AI Victor on 21,346 at 2000z and on 14,235 at 2100z. QSL via W9WHM. (LIDXA)

**South-West Africa:** ZS3B Jerry on 14,280 at 1900z, and ZS3HT Herb on 15 mx 2030z on up. QSL for ZS3HT via WB2NQR. (LIDXA)

**Mauritius:** VQ8AX says QSL address in current callbook is O.K., with addition of C/o Admiralty Offices. VQ8AI has been heard on 14,052 at 1800z. (LIDXA)

**Cape Verde Is.:** CR4AE worked on 14,060-063 at 2000z. (LIDXA)

**Basutoland:** ZS8K Doug on 14,218 at 2030z. QSL to Box 363, Masery, Basutoland. ZS8G and ZS8L are also reported on s.s.b. (LIDXA)

**Timor:** CR8AF Luis still active. Usually from 1100 to 1300z around 14,080 Kcs.

**Singapore:** As from 1/2/66 the prefix for this State will be 9VI superseding 9M4.

**West Samoa:** 5W1AZ after being quiet for a while is now active on 14 s.s.b./c.w. Afternoons, our time is best. QSL C/o Airport, West Samoa.

**China:** BY3AAB reported active from the People's Republic. 14,050 at 0800z. (G3UGT)

**Ross Is. (Antarctica):** ZL5AA ex-ZL1ABZ Ian Jonston is expected to be on very soon. (G3UGT)

**Anguilla:** W0QUU Jack and one or two other operators scheduled to be QRV March 11-15 on s.s.b./c.w. During the A.R.R.L. contest. QSL W0NGF.

**Re-Union Is.:** FR7ZD Guy heard on 14,232 at 1800z.

**Bonaire:** PJ5BD and PJ5BC Virginia and Kirk Bush (K0GZO and K0GZN) operating from the Flamingo Beach Club there, 14,270 at 1900z. QSL's to home QTH. (LIDXA)

**Macquarie Is.:** VK0TO Trevor worked on 7004 c.w. at 1130z recently.

**Pitcairn Is.:** Tom VR6TC still has Monday skeds with his mgr. W5OLG, on 21,065 at 2000-2100z and will listen for you when finished. Tom has a.m. also.

**Afghanistan:** YA1AW Hutch will be on s.s.b. for next 10 months. QSL via K5GOT.

**New Hebrides:** FU8AG on 14,090, 0800-1030z.

**Republic of Congo:** TN8AF on 14,035 at 1900z.

**Campbell Is.:** ZL3UY on 14,046 at 0300z.

**Canary Is.:** EA8CR John on 14,245 working 253 around 2100z. Also worked EA8CY and EA8EC on 14,020 Kcs. at 1500z.

**Bulgaria:** LZ1BZ Mitko on 14,224 at 1230-1430z. QSL to Callbook QTH.

**YI and 3V8.** It is rumoured that Gus Browning WA8PBD has or can get licences for these places and is planning them for our autumn. (LIDXA)

**Albania:** G3AAE reports that activity from Albania will be permissible in 1966.

**Bouvet Is.:** ZS1CZ reports that a scientific expedition to here is planned for some time in 1966. Possible Amateur activity.

**Senegal:** 6W8CW John on 14,241 at 1800z. QSL via W2VCZ.

**Tahiti:** FO8AG 14,250, FO8BJ 14,100. Both active from 0500z. (Chas. L4018.)

**DX-peditions:** Unofficial report says that Dave G3HS is making preparations to circle the globe. Licences have already been granted for VR1H and 6Y5HS operation. (Fla DX'er.)

**St. Helena:** ZD7IP reported on 7007 xtal on QRP to V beam on U.K. 1800-2000z. QSL R.S.G.B. (LIDXA)

**Armenia:** UG6KAA on 14,218 around 1330z. Also worked 7010 Kcs. 1800z.

**Jan Mayan:** LA8FG/P. Mostly on 14,255 about 1500z.

**Aden:** VS9ARV and others are on 14 c.w./s.s.b. nightly 1400z and later.

**Swan Is.:** Said to be active almost daily. W0YKD/KS4 14,075 and 14,255. QSL WA4PXP. Try 0600z. Also KS4AB 7007 0500z. QSL WA9LCY.

**Turkey:** TA2BK 14 c.w. 0800z. Legitimate station.

**Vietnam:** K1YPE/XV5 Bill Porter. Acceptable to A.R.R.L. QSL Amer. Embassy, Saigon. (LIDXA)

**Surinam:** PZ1BW Bert, 14,234 2100z. QSL VE3EUU.

**Swaziland:** ZD5D, 14,200 2130z. WB6CWD is manager. (LIDXA)

**Nauru:** Lloyd and Iris W6KG and late KX6SZ Majuro Is. are expected to show up from VK9 Nauru. 14,050 Kcs. any time.

**Tchad Rep.:** TT5AW, 14,115 1400z. Said to be ex-TL8SW.

**Angola:** CR6EC Ernesto 14,250 2000z. Callbook QTH O.K. (LIDXA)

**Mongolia:** JT1FM and one or two more on 14 c.w. any time after 0700z.

**Tristan de Cuhna:** ZD9BE Alan, 14,030 1800z.

### ACTIVITIES

**Ken VK3TL** reports that he made DXCC during his stint on Norfolk Is. as VK9TL. This month as usual he has really been among the big ones. Worked 14 c.w./s.s.b. 5T7H, IS1VAZ, 9N1MM, PJ5BC, VQ9TC (Seychelles), 9Q5YL, VR5AB, XT0H, 9X5PS, 9F3USA, CN8FS, 9J2JC, VE8CO (Zone 2), 9L1HX, 6W8AG, ZK2AF, HK0KL, PJ2CE, SL7CA, HR1JAP, HI8XMT, 5VZ8CM, IS1RUA, 6O6BW, FB8WW, YA1AW, YK1AA, HS1AK, VP2VE, VE0MY, CO8MN, VP7NS, VP6KL, TG8FA, FW8ZZ. QSL's received IS1VAZ, JY74, OD5CN, ZP5BC, W9WNV/8F3, 5H3JR, PE2EVO, VQ8BFA, OY3B, VP4DS (Trinidad), VQ9TC, PJ2MI (Saint Martin), FL8MC, ZD8HL, VP2SJ, 7Z3AB, HK0AI, 5N2RJO, TF3EA, EL7A, 5W1AZ, VP1KJR, VP1PV, VP2KD, PJ2CR, etc.

**Dud, VK4MY** reports 14 Mcs. best around 1300z. He worked OD5LX, VR5AB, TI2PZ, 9M6KS, YV1AD, 5R8AL, OE7RMI, VQ8BJ, PY1MCC, ZK2AF, EA3KI, ZS6IE, KZ5AY, 7Z3WS, EP2EZ, FU8AA and lots more.

**Chas. VK4UC** on 14 c.w. mostly around 1300z picking out the best. This month he creeled HK4EB, OE2CML, 4X4MN, 9M6KS, 5R8AL, 9V2VB, VR5AB, EA7KE, OK1FV, 7Q7JO, HB9UP, HS1CW, I1ZRV, UB5IF, VS9MB (Maldives), GI4RY, SL2AD, VS9AFT, VS9ATH, UM8AP, FW8ZZ, ZS6OY. QSL's received UV3TQ, 9K2AN, KM6BI, YO8CF, VQ8AI, VQ8AW, LA1H, OH0VP, MP4BFK, FL8MC, OD5LX, OA8D/3.

**Barry, VK5BS,** who runs QRP, send in this 14 Mcs. work list: VS9MP (QSL via W2CTN), 9M4JW (QSL via K4ISV), 9F3USA (QSL via W7TDK), 5Z4IR, IS1FIC, MP4TBU, YJ1DL, VS9OC, ZK2AF, UM8KAK, etc.

### QTH's (All by VK3TL)

PJ5BC via K0GZN or VK3VJ.
VQ9TC Box 191, Mahe, Seychelles.
9Q5YL Box 1573, Elizabethville, Congo.
5T7H, XT0H via Hammarlund.
9F3USA via W7TDK.
VE8CO (Zone 2), Hammarlund.
9L1HX via VE4OX.
HK0KL via HK4KL.
HK0AI via W9WHM.
HR1JAP via Box 393, Tegucugalpa.
HI8XMT U.S. Embassy, Santa Domingo.
HI8RSD Box 1026, Santo Domingo.
6O6BW via W4HKJ.
VP2VE via W2MDQ.
9M2YY/P via W2CTN.
YA1AW via K5GOT.
VE0MY Box 850, Halifax, Nova Scotia.
CO8MN Box 102, Bayamo, Cuba.
VP7NS via W2CTN.
TG8FA via Box 42, R.E.U.

### SUMMARY

Recently deceived a world classification of stations and their QSL Managers. It would take up yards of a town crier's paper so long is the list. This is another new fashion in Ham radio and while it certainly speeds up confirmations, I suspect for some there's a status symbol attached. You know—see my manager! Human nature being what it is, there are already signs that those of the common prefix will have to BUY their QSL from the more rare call sign. Some managers request both S.A.E. and I.R.C.'s for a QSL. This is the same as asking I.R.C.'s for an award. The merits or otherwse of this I leave you to consider.

My thanks to all last month's contributors.

73 DX, Al VK4SS.

### A.R.R.L. DXCC

The following note appears in the January, 1966, issue of "QST." Since it affects all DXCC participants and since the submission requirements as indicated in this DXCC note will be applied to all submissions being made for DXCC credits you will want to read and follow them. Submissions made not in accordance with these requirements will be returned without credit.

**DXCC Notes (January, 1966, "QST.")**

"In order to streamline administration of DXCC and provide better handling of applications for certificates and endorsements, the following changes are being made:

(1) After this issue the Honour Roll listing will be carried in the June and December issues of 'QST.' A listing of endorsements and certificates earned below the Honour Roll level will continue in each issue, and the overall listing will continue in the December issue as at present. All listings will be alphabetical by call sign, under the appropriate country total, as illustrated in this month's Honour Roll listing.

(2) Effective March 1, 1966, applications for endorsement stickers will be made in lots of 20 for those whose totals are below 300, and lots of 10 for those with totals over 300. For example, if you have 120 confirmations now credited, you should not make further application until you have 20 more cards, to reach the total of 140. If you have 125 confirmations now credited, you should not make further application until you have 15 or more cards to reach the total of 140. In both cases, your next application would be when you have enough cards to bring you a total of 160. Should you now have a total of 303 credited, an application with seven cards would be accepted, as it would bring you up to a total of 310. QST listings will be shown at the appropriate 20 (or 10) card endorsement levels.

(3) Further card submissions from those on the Honour Roll will be accepted only during the months of March and September, for the June and December Honour Roll listing. If you have enough new cards to bring your corrected total up to that of the last place station on the previous Honour Roll listing, you may submit them during March and September without being held to the 10 country limitation specified in para (2) above.

(4) Up until December 31, 1966, separately endorsed DXCC certificates will continue to be issued for phone. Each DXCC application after that date may include cards indicating work by any legal mode, but a separate DXCC certificate endorsed for phone will not be issued.

Effective January 1, 1967, all endorsements for any DXCC certificate will be issued regardless of mode of operation. That is, if you have a phone DXCC certificate, your application for further sticker endorsements to your countries total include both c.w. and phone contacts—no distinction will be made by A.R.R.L."

[There has been a report that commencing January, 1967, no credits would be given by A.R.R.L. for cross mode working, i.e. phone to c.w. and vice versa. However, A.R.R.L. said this was not planned.—Frank VK2QL.]

— . . . —

# Correspondence

Any opinion expressed under this heading is the individual opinion of the writer and does not necessarily coincide with that of the publishers.

### "VERBOSITY . . ."

Editor "A.R.," Dear Sir,

I join with 4PX (January correspondence) relative the verbosity and waste of valuable paper by 5PS in his divisional notes.

I respect most deeply his voluntary contributions (one full page for January) for his Division, however, I again join 4PX in suggesting that such space should be devoted to the "Art" of Amateur Radio.

I note your comments, "Couldn't agree more," but sir, what does the Publications Committee propose to do? I feel it unnecessary to ask my Division to take action, surely those in charge of "A.R" are men not mice.

J. C. Watson, VK6JW.

[Rats!—Ed.]

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ACV—6, 12, 120, 300, 1,200, 3,000 at 4K o.p.v.
DC mA.—0.3, 3, 30, 300.
DC Amps.—3, 12.
AC Amps.—3, 12.
OHMS—10K, 100K, 1 meg., 10 meg.
DB—Minus 10 to plus 17.
Minus 0 to plus 23.
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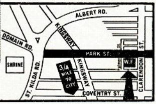


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# FEDERAL AND DIVISIONAL MONTHLY NEWS REPORTS

(SEND CORRESPONDENCE DIRECT TO DIVISIONAL REPORTER NAMED AT PARA. END)

## FEDERAL

Last month the editorial expressed the hope that there would be more effort made at getting closer liaison between countries in Region III.—Australia, New Zealand, India, Malaysia, to mention a few, so that mutual problems affecting our use of the frequency spectrum can be aired, and if necessary or practicable, solutions found.

Following closely on this thought, is an expression of support from the I.A.R.U. President, Herbert Hoover, Jr., W6ZH, as can be seen from his letter recently received by the Executive. We feel that the tenor of his remarks sets the seal on present thinking with reference to I.T.U. matters, and you will see as you read it that concern is rather high in other parts of the world, for the future heading of Amateur frequencies. Read it carefully, consider the implications—not only for our own part of the world—but for the Amateurs world over. Perhaps you have some ideas and recommendations on this subject; perhaps your Division may ask you for support for a Regional conference. Let us have your comments now.

After speaking of recent visits to other I.A.R.U. Societies, and the benefit to be obtained therefrom, President Hoover goes on to say:

"I believe that there is one principal problem which we face, transcending all others in importance. This is because—if we fail to meet it adequately—there will be a very serious disruption of international Amateur Radio as we know it. That problem is, of course, future I.T.U. conferences dealing with Amateur frequency allocations.

"No one can be certain just when such a conference will be held. The I.T.U. itself is undergoing some re-organisational changes as a result of its Plenipotentiary Conference just completed in Montreux. No date for the next allocations conference was set. It is almost a certainty, however, that one will be held—probably within a few years.

"You are aware that these conferences establish the limits of various frequency-band assignments for Amateurs as well as for other radio services, and that normally an individual national administration can authorise Amateur activity only within the basic provisions of such allocations. In other words, if the next allocations conference fails to continue present assignments for Amateurs in the international allocation table, the national administrations will be obliged to reduce Amateur frequency bands to conform.

"My discussions, and those of my associates, with I.A.R.U. society officers, indicate to us a growing Amateur recognition of the vital problem of protecting our Amateur assignments. This is indeed most encouraging. I believe, however, that even greater attention and effort must be forthcoming from each of our societies if our aim is to be accomplished.

"There is a point of major importance at this moment, one which we must work toward now, without waiting for conference developments. That concerns the matter of close liaison between each society and its telecommunications officials. While procedures are not the same in all countries, usually the proposals of each administration at a conference are the results of long-term evaluation and planning. In some countries this takes the form of intensive preparatory meetings, two or three years in advance. By the time the conference opens, therefore, the administration has already established its position and, in many cases, it will even have published the proposals it expects to offer. In other words, the position of many governments toward Amateur Radio will have become firmly committed before the conference begins with only a little bargaining margin available.

"A delegation of I.A.R.U. observers at the conference itself is essential if our overall plans, and the effectiveness of such delegations has been evident from previous conferences. However, we cannot expect such a group to do the whole job, nor is it feasible for them to accomplish the impossible feat of reversing anti-Amateur proposals by administrations who are not well disposed toward the Amateur Service.

"Ideally, if every society were active and successful in convincing its authorities to support our present Amateur allocations, the task would be much simplified. Accordingly, I urge you to give serious thought to this problem, and then take action by establishing suitable liaison with your governments, or expanding that contact where it already exists, working toward full support of the Amateur Radio Service.

"An intensive programme is particularly important in view of the many new and developing countries who are members of I.T.U. There are now 129 governments which take part in its proceedings, and it should be remembered that each one has an equal vote. As of today there are just 64 I.A.R.U. societies, which means that we are represented in only one-half of the countries who cast a vote in the I.T.U.

"The solution to these problems will require close co-operation between Amateur societies on a world-wide basis, and success will tax our ingenuity and resourcefulness to the utmost.

"Several of our I.A.R.U. Societies have effectively organised their efforts by appointing permanent liaison committees or 'working groups,' consisting of members who have close contact with their governmental authorities, or special experience in these fields. I recommend this procedure for the consideration of each of you.

"I particularly wish to commend the I.A.R.U. Region I. Organisation for the energetic and constructive manner in which it is helping to meet these problems. But they cannot do the job alone. **There must be a parallel effort by the new Region II. Organisation, and hopefully, by one yet to be formed in Region III.**

"While the activities of the Regional Organisations are indispensable—especially in the field of co-ordination—I wish to emphasise that the responsibility for success falls primarily upon the shoulders of each of our I.A.R.U. Societies.

"In my opinion the survival of Amateur Radio, as we know it today, will depend upon our individual efforts in the immediate future. There is no time to spare!

"I would welcome any word from you on the subjects I have referred to herein—or any other I.A.R.U. matters—and would particularly appreciate any suggestions or recommendations you may have. If you feel there are any areas in which I or the Headquarters society could be more specifically of assistance to you, please let me know."

### VK5 GETS UNATTENDED BEACON PRIVILEGES

Following representations made to the Postmaster-General's Department on behalf of the South Australian Institute Station VK5VF, we are please to be able to write that this beacon operating in the 6 and 2 metre band will be able to operate unattended subject to the adherence to certain procedures. It is important to note that the prime requirement is "the prompt termination of transmissions at the request of an officer of the Radio Branch."

We regard this decision as a big step forward in the growth of Amateur Radio in this country, and no doubt the many v.h.f. operators will gain important information from the continuous operation of these beacons.

Details of frequencies and other pertinent information will be published as they come to hand.

### FEDERAL EXECUTIVE MEETING, 1st NOVEMBER, 1965

After dealing with the usual amount of inwards correspondence, the meeting was acquainted with the latest drafting proposals of the new Handbook. There were several matters still to be resolved and these would form the basis for another meeting between the W.I.A. and P.M.G. representatives. The remainder of the meeting dealt with F.C.C. Contest matters, the present state of the "QST" fund, and the appointment of a Federal Oscar Co-ordinator, David Bellair, VK3ZFB. There was also a report of the t.v.i. problems at Port Pirie.

**SILENT KEY**

It is with deep regret that we record the passing of:

VK3LX—L. G. H. Harding.

### FEDERAL EXECUTIVE MEETING, 6th DECEMBER, 1965

The meeting having dealt with correspondence, the Secretary reported that Mr. Owen was still trying to resolve with the N.S.W. Division the question of proportional representation in relation to the new Constitution. A report was made on the progress of the new Handbook and another meeting with the P.M.G. would take place early in the new year. Reports were given on the recent Jamboree-on-the-Air and ways of improving it from a W.I.A. point of view.

Discussion took place under general business on the Gowrie Park Y.R.C. and it was agreed that the W.I.A. had no jurisdiction of this, and would write to the P.M.G. informing them that the W.I.A. did not support this idea. Other matters dealt with included correspondence in Electronics Australia, handling of R.S.G.B. publications and clarification of P.M.G.'s letter re future representation on frequency committees.

### I.A.R.U. CALENDAR, DECEMBER, 1965

The I.A.R.U. celebrated its 40th Anniversary during the year and a brief history of the I.A.R.U. since its inception in 1925 was given. As at 1929 when the I.A.R.U. became firmly established, there were 14 members, of which the W.I.A. was one.

Three new Societies were admitted during the year, namely, the Bahams, Nigeria and Zambia Societies. The Region I. Division of the I.A.R.U., now 15 years old, planned its 1966 meeting for Opatija, Yugoslavia, during May. The first meeting of the newly-formed Region III. Division held its first meeting at Lima, Peru, in March, 1965. Moves are also afoot for closer co-operation in Region III., but the question of distance and finance makes this area the most difficult to deal with. Further countries exchanged mutual reciprocal operating agreements with the U.S.A., and it is interesting to note that the work of the I.A.R.U. now entails the part time employment of seven of the A.R.R.L. headquarters staff.

From September 14 to November 12, 1965, the I.T.U. held a Plenipotentiary Conference in Geneva with some 120 nations participating. The Conference dealt with various administrative matters of the I.T.U. including the Council which has now been increased from 25 to 29 members, six from the Americas, six from Western Europe, three from Eastern Europe and Northern Asia, seven from Africa and seven from Asia and Australasia (including Australia). The Conference rejected proposals to abolish the I.F.R.B., the International Frequency Registration Board, but decreased its size from 11 to five members, one from each of the above five Regions. Dr. Sarwate of India now replaces Gerald Cross W3GG as Secretary-General. Under the 1959 and previous I.T.U. Conventions, there was provision for three conferences other than the Plenipotentiary—the Administrative, Extraordinary Administrative and Special conferences. Under the new Constitution, effective 1st January, 1967, there will be two types only—World and Regional. The activities of each such conference will flow from the agenda, originally drafted by the Administrative Council and then approved by vote of the member nations geographically concerned. Thus whether or not a specific conference takes up the subject of allocations will be henceforth determined by the agreed agenda, rather than by title. The I.A.R.U. will have the same observer role under the new Constitution as under the old.

In September, 1965, the I.A.R.C. held a convention and a separate report has been received from the International Amateur Radio Club on the activities during this period. One of the highlights was the on-the-spot issue of HB9X call signs to visiting Amateurs to the Convention.

I.A.R.U. headquarters has pointed out that the development of the so-called "new and developing countries" in relation to Amateur Radio will depend on a vigorous campaign from existing I.A.R.U. Societies to promote and assist Amateur Radio in these countries. An awareness of the international and national usefulness of Amateur Radio will instill a sympathetic attitude into these countries, for it is from these countries, now clamering for more and more frequencies, that the major Amateur opposition could spring. The A.R.R.L. has therefore taken Liberia

"under its wing" and the R.S.G.B. is doing the same in Nigeria, with material as well as educational assistance. The H.Q. has asked for member comment on a proposal of this sort and the W.I.A. will be giving serious consideration to such a project.

The Calendar also reports on the success of Project Oscar III. Oscar IV. was launched on December 21, but is in a highly eliptical orbit.

Two new members are proposed in this Calendar for membership of the I.A.R.U.—namely, the Club de Radio Experimentadores de Nicaragua (C.R.E.N.) and the Central Radio Club of Czechoslovak Socialist Republic (C.R.C.). The W.I.A. resolved to vote for both admissions with the proviso in regard to the latter society that they make available for general publication a list of all their Amateur stations.

A list of stations logged by the I.F.R.B. on unauthorised frequencies is shown below. Any Australian Amateurs hearing these or other stations in the exclusive Amateur bands should notify their Divisions on the proper forms which are available from Divisional Secretaries:—

| | | | |
|---|---|---|---|
| 3560 | Kc. | Pyongyang .... .... .... | BC |
| 7000 | ,, | Malaysia .. .... .... .... | BC |
| 7035 | ,, | U.S.S.R. .... .... .... .... | BC |
| 7035 | ,, | Peking .... .... .... .... | BC |
| 7050 | ,, | Cairo .... .... .... .... | BC |
| 7060 | ,, | Peking .... .... .... .... | BC |
| 7065 | ,, | Peking .... .... .... .... | BC |
| 7075 | ,, | Cairo .. .... .... .... .... | BC |
| 7080 | ,, | Peking .... .... .... .... | BC |
| 7085 | ,, | U.S.S.R. .... .... .... .... | BC |
| 7090 | ,, | Tirane .... .... .... .... | BC |
| 7095 | ,, | Peking .... .... .... .... | BC |
| 7099 | ,, | Djakarta .... .... .... .... | BC |

In addition, the Intruder Watch, operated by the A.R.R.L., has also consistently heard a large number of unauthorised stations operating in all Amateur bands but the list is too long to reprint here. There are 41 stations listed. If you hear any such stations please take action as mentioned above.

### LICENSEES IN AUSTRALIA

Members will be interested to learn that as of December, 1965, the number of licensed Amateurs in Australia passed the 5000 mark, quite a milestone which indicates Amateur Radio's growth in the Commonwealth alone, So in a little over 50 years, numbers have increased from a meagre 400 to the present figure. It is perhaps of greater interest to know that numbers have doubled since re-licensing after the 1939-45 war, when licensees were around 2500. It is a pity that our membership figures have only just about kept pace with this growth. Every endeavour should be made to increase our membership at a greater rate than the licence growth.

### I.T.U. FUND

As at the 1st February, 1966, contributions to the Fund, as a percentage of the target set at the Sydney Convention are as follows:—

| | | | |
|---|---|---|---|
| VK2 .... .... .... | 22% | VK5 .... .... .... | 56% |
| VK3 .... .... .... | 50% | VK6 .... .... .... | 103% |
| VK4 .... .... .... | 50% | VK7 .... .... .... | 100% |

These figures do not necessarily indicate all monies collected in Divisions but only those received by the Federal Treasurer. Please keep the donations flowing in as we are still 53% short of our designated target.

### AMATEUR BAND SUB-DIVISIONS

The following are the voluntary sub-divisions of the Amateur bands in Australia agreed by Federal Council, and we ask all Amateurs to please observe these channels:—

| C.w only | C.w. and Phone |
|---|---|
| 3500 — 3535 Kc. | 3535 — 3700 Kc. |
| 7000 — 7030 Kc. | 7030 — 7150 Kc. |
| 14000 — 14100 Kc. | 14100 — 14350 Kc. |
| 21000 — 21150 Kc. | 21150 — 21450 Kc. |
| 28000 — 28200 Kc. | 28200 — 29700 Kc. |

### MEMBERSHIP RETURNS

All Divisional Secretaries or Treasurers are reminded that membership returns on Form A are required monthly by Executive. It is essential that Executive obtains figures from ALL Divisions, especially at this time of the year as per capita contributions are based thereon. Your co-operation would be appreciated.

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## FEDERAL QSL BUREAU

Changes in the A.R.R.L. QSL Bureaux, effective immediately are:—

W/K/WA1 — Providence Radio Association, W1OP, Box 2903, Providence, Rhode Island, 02908.

VO2—Goose Bay Amateur Radio Club, P.O. Box 232, Goose Bay, Labrador, Canada.

HS1CW confirmations may be obtained from W1BVP, 191 Algonqum St., Brockton, Mass. Quote G.M.T. please.

The first International Boy Scouts QSO Party took place February 5 to February 7. The Club station of the sponsoring body: Coplay Amateur Radio Club, Coplay, Pa., U.S.A., is K3WQW. Awards are issued as under:— Foreign stations contact Club Station and one member. All contacts with Coplay Radio Club members count also towards Pennsylvania's Keystone Award which requires 100 QSO's with Pennsylvania stations. Send log data and $1 for award (if earned) to K3WQW, Post Office, Coplay, Pa., 18037, by March 1, 1966. All QSO's will be acknowledged with a special QSL card.

QSL's for contacts with TM5AA, stated to be located at Kalimantan, Borneo, Indonesia, have come to hand via the Swiss Bureau. The period of operation was around February, 1965, and the station at that time was generally regarded to be a pirate, due to the poor note and method of operation. QSL's should go to HE9GAY direct or through USKA.

Cards for VK0 stations have, ever since 1948, introduced many disposal and other problems to the Federal QSL Bureau and much ineffective and frustrating correspondence has resulted from the failure of many VK0 stations to honour QSL obligations after their return to the mainland. Antarctic licensees (or those associated with them) should advise this bureau of their call sign, home QTH, QSL manager (if any) and instructions for disposal of incoming cards. Where no advice is received it is intended to send all cards to the Antarctic Division and not enter into any correspondence. Any subsequent information received will, however, be published in this column from time to time.

—Ray Jones, VK3RJ, Manager.

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# NEW SOUTH WALES

## DIVISIONAL CONVENTION

### Australia Day Week-End

The week-end activities opened with the general meeting on Friday night. There was an attendance of over 100 to hear a series of interesting lectures. David VK2ZVW described the v.h.f. group project—The Mobiliser, a 2-metre transmitter/receiver combination. Leo VK2AC described an electronic keyer, Stan VK2EL with s.s.b. equipment, Bill VK2ZDO with Amateur Television, and Barry VK2ZAH with f.m. units.

Several presentations were made during the meeting. The best lecture to the general meeting for the past year was awarded to Mr. Allan Morris from D.C.A. and his subject was Magneic Amplifiers. The Adams Trophy for the best VK2 article in "A.R." went to Roy Lester VK2ZRL for a 6 and 2 metre converter. The John Moyle Award to the top A.O.C.P. pass in VK2 for the year went to Ron Glover. The Shield known as the Jim and Ruth Corbin, for the teams placing in the R.D. Contest, was presented to the Division. The Federal Councillor, Pierce Healy, VK2APQ, was re-elected unopposed.

On Saturday night a dinner was held in the hall at the Wireless Institute Centre. Between 60 and 70 attended, a good number of XYL's attended. The dinner was organised by Bill VK2YB, M.C. was Sid VK2SG. Morrie VK2VN moved the toast to Amateur Radio and the Institute and the reply was from Ivan VK2AIM. Pierce VK2APQ moved the toast to the visitors and the reply was from Frank Noel K6EDQ. (Frank and his XYL are on a world tour and have been in Australia for several weeks.) The P.M.G. was represented by Mr. R. Holt. There were several country visitors present. After the dinner two debates were conducted. The first was Home-Brew versus Commercial, and the second, Amateur Radio versus Gardening.

The field day was held on Sunday at the Divisional transmitter site at Dural. Over 100 Amateurs were present and together with XYL's and harmonics the attendance exceeded 200. A collection of stalls, displays and field events made up the programme for the day.

This is the month for the Annual Meeting and the election of a new Council. The meeting is on the 4th Friday at W.I.C. 73, 2ZTM.

## NORTH-WEST ZONE CONVENTION AND FIELD DAY

The first of the above events was held at Tamworth on the 29th and 30th January and proved to be a great success. It was only made possible with the co-operation and organisation of the Tamworth Amateurs.

The week-end started on Saturday with conducted tours of the studios of NEN, Channel 9, and Broadcast station 2TM. This was followed by an inspection of the D.C.A. installation in the control tower at Tamworth Airport. These were followed at night by a buffet dinner at which 36 Amateurs and friends were present. The guest speaker was Lionel Todd, VK2LS, who was the first licensed Amateur in Tamworth in about 1925. Lionel spoke of his Amateur experiences in the early days of radio.

The whole week-end received excellent local radio, press and t.v. coverage. After the dinner a 2-metre fox hunt was held, but it was not located due to some technical problems and a good location at the fox's end. The signal was not heard at the start and the hounds assumed that he was not on.

The Sunday was very well attended, there being about 50 Amateurs, XYL's, harmonics and visitors, from all parts of the North-West as well as Sydney and Newcastle areas.

Light refreshments were available to the visitors on arrival and before departure as well as ice creams and soft drinks for the harmonics and 807s for the operators.

Acknowledgment and thanks for the donation of prizes go to Pye Crystals, Mullard, Lawrence and Hansen, VK2 Divisional Council, Philips and E.M.I. Also to VK2RJ and VK2BAE. There was also technical literature from A.W.V., Ducon and Delco. The prizes were presented by Frank VK2ACQ, the Divisional representative.

I wish to thank all who attended and also a special vote of thanks to Bill VK2ZCV, Tas VK2GV, Brian VK2AUN, Noel VK2ASQ and Les VK2RJ, for without their help the week-end would not have been possible. Hoping to see all who attended and more at the next and greater North-West Zone Convention 73, Max, VK2BMK, Zone Officer.

## ZONE 2

Zone 2 of the VK2 Division is a Civil Defence grouping roughly west of the Great Dividing Range, from about Muswellbrook in the south to the VK4 border in the north and west towards Walgett. Max VK2BMK is the Zone Officer. A hook-up is held on 80 metres on Tuesday nights. It is planned to set up a v.h.f. net on 6 metres in the near future. The chosen frequency will be 53.466 Mcs. While this means yet another "net frequency" many of the receivers in use will be tunable. (Having watched the growth of "nets" in the past few months the common factor appears to be "crystal availability.").—2ZTM.

## HUNTER BRANCH

If there is still anyone who knows nothing about transistors after attending the February meeting of the branch then I give up. Still, I did see some members scratching heads and muttering following the film concerning semi-conductors. It couldn't possibly have been the maths.—that was easy enough! Anyway, for those who are not in on the secret, a film about semi-conductors was screened at the last meeting and about 35 members, visitors and associates were present to enjoy the proceedings. Mr. Mullard kindly lent the photographic material but everything seemed to go wrong from the beginning. No projector, no take-up spool, no knowledge of calculus and no musical items from the President. It was all very upsetting. However, after a shaky start things went well and we all learned something.

Prior to the main part of the proceedings, three boys from the Westlakes Radio Club were awarded their Junior Radio Certificates of the Youth Radio Scheme. Those prospective Amateurs of the future are Neil Kilgour, one of our junior associates, Ian Miller and David Fraser. Congratulations also to Michael Kane, who could not be present to have his certificate presented.

It is a great pleasure to take back all the nasty remarks I have made over the years concerning Ian 2AJF (who is known to his friends as Sherwood) since he has at last redeemed himself by passing the Broadcast ticket. This is a fine piece of work Ian and a good example for others of our young members to follow. But, here's the rub, as the classics would have it, when are you going to get on the air? Another branch member also deserves praise at his achievement—one VK2BOB or Belmont Bob to his creditors. Bob has faced the examiners more times than most of us but he finally struck the jackpot and now radiates a fine signal both on the old gentleman's band and on 40 as well. And still another bouquet must be awarded, this time to Henry 2ZGK who, although he was nearly out of the band, did eventually get on 2 metres. So what with Col 2YJ finally burying the skeleton and getting on 80 and Les 2RJ joining the duck farmers, things have really been looking up during the holiday season. It wouldn't surprise me to hear that Susan 2BSB had finished her 20-metre transmitter or that 2AWX put out a decent signal on 160 metres—I'm used to surprises now. Although when told that Harry 2AFA had a c.w. contact some weeks ago I must admit to a mild degree of concern.

It is rumoured that Jack 2KQ has been visiting Lightning Ridge recently looking for quartz to make some new crystals for his s.s.b. rig but there is no confirmation of this. Reporting on Fred—2ZFO—our "Man in Fassifern" (he took over from Sherwood)—he now has progressed still further towards being on the air by having a table on which to put the gear.

John 2ZBD and Ian O'Toole are both polishing their rifles and boots and brushing hats, fur felt, for a sojourn in the forces for national service. Whether they become signallers or not, remains to be seen. But, whatever happens, if communications go out then they'll have to fall back on our Singleton agents—007 Oosterveen (translated 2BJO) and 007½ "Bones" Bedford—who are the brains behind the communications in that outpost of civilisation. You'll recall tht Paddy 2AXU, once a signaller himself, shifted camp to Wangi to escape the powerful signal from Jim 2AHT. Well, now he has been out-manoeuvred by Vic 2AKP who has come to live just across the water. Now he really will have to put up an aerial.

Under the watchful eye of the chief architect, Max McLachlan, foreign officer, the boys at the Westlakes Club are working hard on the new shack and equipment to go in it. It is just remotely possible that 2AWX will have a good signal soon on three bands. So listen in on Monday evenings at 7 p.m. on 3595 where there's bound to be a signal and hear the latest programme of events. For instance, there's going to be a field day soon but details are not available just now and of course there's the meeting for March. You really must come along to this one as all the professional arm-twisters and election recketeers will be there to see democracy given a fair go—and then tossed out. Seriously though, it is a most important meeting and all should be present. We may even get some of those who criticise the Institute on the air —but never voice an opiinon at meetings because they don't attend. Electing someone like this to office would really get results I'm sure. The whole affray will be in Room 6 of the Clegg Building, commencing at 8 p.m. on Friday, 4th March. And please gentlemen, a little decorum! See you.

73, 2AKX.

## CANBERRA RADIO SOCIETY

### Easter Convention

Canberra offers all the facilities for a Convention-with-a-difference. You can have Amateur Radio events, top-interest scientific visits, and tourism for all the family, in any proportion you like.

For Amateur Radio there will be all the usual Tx Hunts and Scrambles, Disposals and White Elephant Sale bargains (bring something to sell), together with a new event of our own—a Receiver Sensitivity Contest.

For scientific interest, special visits (with commentary by people working on the project) are arranged to Tidbinbilla Space Track Station, Mills Cross Radio Telescope, Nuclear Physics Dept. of the Australian National University, Mt. Stromlo Observatory, and Belconnen (Navy) Tx (most powerful in the Southern Hemisphere).

Tourism for all the family is available without need of a car all the time. Canberra offers more than enough for a week-end, even without a trip to the nearby Snowy Mountains. XYL's are welcome at all functions.

Accommodation. There is a full range in type and price. We are holding a number of beds covering the whole range from Camping Reserve cabins at about $1.50 per bed per night to the very best hotels and motels at $10.50 for B. and B. We strongly advise you to write to use and book early. Last-minute bookings can be arranged but there would be little choice or range.

Write to Canberra Radio Society, P.O. Box 59, Kingston, Canberra, A.C.T.

## VK3 State Convention

**ARARAT, 23rd and 24th APRIL**

(25th is a holiday, so you can plan a long week-end.)

Excellent 4-course dinner Saturday night. Liquor licence arranged.

First-class programme arranged for Sunday, location, Mount Mistake Picnic Ground.

Bookings close 2nd April (Deposit $2) with Neil Granville VK3AQD, 1 Speed Street, Ararat.

## TRANSISTORS AND DIODES

| | | |
|---|---|---|
| AC125 .. .. | 9/6 | 95c |
| AC126 .. .. | 9/6 | 95c |
| AC127 .. .. | 10/6 | $1.05 |
| AC128 .. .. | 10/- | $1 |
| AF114N/OC171 | 10/- | $1 |
| AF115N/OC170 | 10/- | $1 |
| AF116N .. | 9/6 | 95c |
| AF117N .. | 9/6 | 95c |
| AF118 .. .. | 22/- | $2.20 |
| BC107 .. .. | 11/- | $1.10 |
| BC108 .. .. | 10/- | $1 |
| BC109 .. .. | 14/- | $1.40 |
| OC26 .. .. | 26/- | $2.60 |
| OC35/AT1138A | 35/- | $3.50 |
| OC44N .. .. | 11/- | $1.10 |
| OC45N .. .. | 11/- | $1.10 |
| OC70 .. .. | 12/- | $1.20 |
| OC71/2N215 | 7/6 or 3 for £1 | 75c or 3 for $2 |
| OC72 .. .. | 13/6 | $1.35 |
| OC74N .. .. | 9/6 | 95c |
| OC75 .. .. | 13/6 | $1.35 |
| OC169 .. .. | 19/6 | $1.95 |
| OC170/AF115N | 10/- | $1 |
| OC171/AF114N | 10/- | $1 |
| 2N217 .. .. | 9/6 | 95c |
| 2N217S .. | 9/6 | 95c |
| 2N270 .. .. | 13/6 | $1.35 |
| 2N370 .. .. | 19/- | $1.90 |
| 2N372 .. .. | 19/- | $1.90 |
| BY100/OA214 | 16/- | $1.60 |
| OA79 .. .. | 4/- | 40c |
| OA80 .. .. | 3/- | 30c |
| OA81 .. .. | 3/- | 30c |
| OA90 .. .. | 3/3 | 32c |
| OA91 .. .. | 3/3 | 32c |
| OA95 .. .. | 3/3 | 32c |
| OA200 .. .. | 7/6 | 75c |
| OA210, 1N1763, 1N3194 HR25 .. | 8/6 | 85c |
| OA211, S10AR2 | 16/- | $1.60 |
| 1N3491 50 p.i.v. 18 a. | 9/6 | 95c |

## ZENER DIODES

| | | |
|---|---|---|
| OAZ200 .. | 15/6 | $1.55 |
| OAZ212 .. | 12/6 | $1.25 |
| OAZ213 .. | 12/6 | $1.25 |
| OAZ225 .. | 27/6 | $2.75 |
| OAZ222/BZZ14 | 27/6 | $2.75 |
| OAZ224/BZZ16 | 27/6 | $2.75 |

## POWER TRANSFORMERS

| | | | |
|---|---|---|---|
| 1992 | 150-0-150v. 30 mA., 6.3v. 1.75a. | 37/6 | $3.75 |
| 1993 | 225v.-0-225v. 50 mA., 6.3v. 2a. | 45/- | $4.50 |
| 2062 | Voltage Doubler, 290, 265v. d.c. 80 mA., 6.3v. c.t. 2.25a. | 67/6 | $6.75 |
| 2064 | Voltage Doubler, 340, 315v. d.c. 125 mA., 6.3v. c.t. 2.25a. | 87/6 | $8.75 |
| 2067 | Voltage Doubler, 310, 285, 260v. d.c. 100 mA., 6.3v. c.t. 4a. .. | 83/6 | $8.35 |
| | 290-0-290v. 60 mA., 6.3v. 2a., 5v. 2a. | 27/6 | $2.75 |
| | 385-0-385v. 100 mA., 6.3v. 3a., 5v. 2a. | 35/- | $3.50 |
| | 385-0-385v. 125 mA., 6.3v. 3a., 6.3v. 2a., 5v. 2a. .... .... .... .... .... .... .... | 45/- | $4.50 |

## AUDIO TRANSFORMERS

| | | | |
|---|---|---|---|
| 2624 | 7000 ohm s.e., 500 ohm s.e. prim.; 2, 3.7, 8, 15 ohm sec. | 46/- | $4.60 |
| 4013 | 15 watt 6600 ohm c.t. 20% prim.; 3.7, 8, 15 ohm sec. | 164/8 | $16.46 |
| 4020 | 10 watts prim. 9000 ohm c.t. 20% Ultra Linear (Mullard 10-10), sec. 3.7 or 15 ohm | | |

## TRANSISTOR TRANSFORMERS

| | | |
|---|---|---|
| TD1 Driver 3000 ohm, 2000 ohm c.t. | 19/6 | $1.95 |
| TD2 Driver, 420 o. c.t., 105 o. c.t. | 19/6 | $1.95 |
| TO1 Output, 375 ohm c.t., 3.5 ohm 500 mw. .... .... .... .... .... .... .... .... | 16/- | $1.60 |
| TO2 Output, 97 ohm c.t., 3.5 ohm 1 watt .... .... .... .... .... .... .... .... | 18/6 | $1.85 |
| TO4 Output, 300 ohm c.t., 3.5 ohm 5 watts .... .... .... .... .... .... .... .... | 37/6 | $3.75 |

## FILAMENT TRANSFORMERS

| | | | |
|---|---|---|---|
| T4/4 | 230v., 6.3v. 2 a. .... .... .... .... | 32/6 | $3.25 |
| 2150 | 240v., 6.3v. 2.5 a., or two by 6.3v. 1.25a. .... .... | 35/- | $3.50 |
| 2155 | 240v., 6.3v. 7.5v., 8.5v., 9.5v., 12.5v., 15v. 1 amp. .... .... | 46/- | $4.60 |
| 12/64 | 240v., 6v. 4a., 12v. 4a. .... | 50/- | $5.00 |
| 12/66 | 240v., 6v. 6a., 12v. 6a. .... | 57/6 | $5.75 |

## ALIGNMENT TOOLS

Jabel No. 4 Alignment Tool Kits. All popular sizes. Four tools in plastic pouch. 12/-, $1.20.

## TRANSISTOR SIGNAL INJECTOR

Pencil Type 2 Transistor, complete with instructions and battery. 55/-, $5.50.

## LAFAYETTE TE-22 AUDIO GENERATOR

Specifications: Sine wave range: 20 c.p.s. to 200K c.p.s. in 4 bands; square wave range: 60 c.p.s. to 30K c.p.s.; freq. response: plus or minus 1.5 db., 60 c.p.s. to 150K c.p.s.; output voltage: load impedance 1M ohm 7v. (max.), load impedance 10K ohm 5v. (max.). £22/2/6, $44.25.

## SPEAKERS

**Well known Make, Brand New, Bankrupt Stock**

| Size | Voice Coil | Price | |
|---|---|---|---|
| 2 inch | 15 ohm | 30/- | $3.00 |
| 3 inch | 15 or 3.5 ohm | 32/6 | $3.25 |
| 4 inch | 15 or 3.5 ohm | 37/6 | $3.75 |
| 5 inch | 15 or 3.5 ohm | 40/- | $4.00 |
| 6 inch | 15 or 3.5 ohm | 45/- | $4.50 |
| 5 x 7 inch | 15 or 3.5 ohm | 47/6 | $4.75 |
| 8 inch | 15 or 3.5 ohm | 52/6 | $5.25 |
| 9 x 6 inch | 15 or 3.5 ohm | 55/- | $5.50 |
| 12 inch | 15 or 3.5 ohm | 82/6 | $8.25 |

## WIDE RANGE LOUDSPEAKERS

| | | |
|---|---|---|
| 5 inch Twin Cone Tweeter, 15w. r.m.s. (4000 c.p.s. to 16 kc.) .... | 45/- | $4.50 |
| 6 inch Twin Cone (60-16,000 c.p.s.) 5w., available in 8 or 16 ohms .. | 50/- | $5.00 |
| 8 inch Twin Cone (50-16,000 c.p.s.), 10w., available in 8 or 16 ohms .. | 75/- | $7.50 |
| 12 inch Twin Cone (45 c.p.s.-10 kc.), 10w., available in 3.5 or 15 ohms | 100/- | $10.00 |
| 12 inch Twin Cone (30-30,000 c.p.s.), 20w., available in 8 or 16 ohms | 195/- | $19.50 |

## SPEAKER BOXES

| | | |
|---|---|---|
| Plastic Speaker Box, with 4 inch speaker and wire .... .... .... | 55/- | $5.50 |
| Wooden Speaker Box with 6 x 4 inch speaker and wire .... .... .... | 65/- | $6.50 |

## CHASSIS PUNCH SET

Hozan K-83, sizes 16, 18, 21, 25 and 30 mm. Complete with taper reamer in wooden storage box 70/- $7.00

## BATTERY CHARGERS

**Dual, c/w. Meter in Metal Hammertone Case**

| | | |
|---|---|---|
| 6 volt 4 amp., 12 volt 4 amp. .... | 157/6 | $15.75 |
| 6 volt 6 amp., 12 volt 6 amp. .... | 217/6 | $21.75 |

## MICROPHONES

**Crystal:—**

| | | |
|---|---|---|
| Piezo Lapel Type with plug .... .... | 12/6 | $1.25 |
| CM20 Hand Type with plug .... .... | 27/6 | $2.75 |
| X43 Stand Type with plug .. .... .... | 37/6 | $3.75 |
| BM3 Pencil Type, 100-8000 c/s. with on/off switch, 6 ft. cable .... .... | 50/- | $5.00 |
| BM3 Desk Stand to suit above .. | 21/- | $2.10 |

**Dynamic:—**

| | | |
|---|---|---|
| Foster DF2 Hand Type, 50K .... .... | 50/6 | $5.05 |
| Foster DF2 Hand Type, 50 ohm .. | 45/- | $4.50 |
| Foster DF3 Pencil Type, 50K .... | 90/- | $9.00 |
| Foster DF3 Pencil Type, 50 ohm .. | 87/6 | $8.75 |
| Piezo X29 Desk Type with stand, low impedance .... .... .... .... .... | 82/6 | $8.25 |

## BEZALS AND NEON INDICATORS

| | | |
|---|---|---|
| Sato 3280 6-8v. sub-miniature, red, green, blue .... .... .... .... .... .... .... | 4/6 | 45c |
| NEZ Neon Indicator, 65v., flying leads .... .... .... .... .... .... .... .... | 3/- | 30c |
| 230v. Red Neon Bezal .... .... .... .... | 6/6 | 65c |

## PARTS FOR RTV & H TACHO

| | | |
|---|---|---|
| Meter (MR3P), 0-1 mA. .... .... .... | 50/- | $5.00 |
| 7080 or 5000 r.p.m. scale .... .... extra | 15/- | $1.50 |
| Henry Choke, ready wound .... .... | 22/6 | $2.25 |
| I.K. Trimmer Pot .... .... .... .... .... | 4/- | 40c |
| Circuit Board .... .... .... .... .... .... | 6/- | 60c |

## VARIABLE CONDENSERS

**Eddystone (Ceramic) ¼ inch Shaft**

| | | | |
|---|---|---|---|
| 580 | Condenser, 13.5 pF. .... .... .... | 22/6 | $2.25 |
| 582 | Condenser, 63 pF. .... .... .... | 25/- | $2.50 |
| 584 | Butterfly Cond., 32 x 32 pF. | 25/- | $2.50 |
| 585 | Condenser, 91 pF. .. .... .... .... | 27/6 | $2.75 |
| 586 | Condenser, 140 pF. .... .... .... | 38/6 | $3.85 |
| 817 | Transmitting Cond., 270 pF. | 52/6 | $5.25 |

**Rolar (Ceramic)**

| | | | |
|---|---|---|---|
| C804 | ¼ inch shaft, 10 pF. .... .... | 22/6 | $2.25 |
| C804 | ¼ inch shaft, 20 pF. .. .... .... | 22/6 | $2.25 |
| C804 | ¼ inch shaft, 25 pF. .... .... | 22/6 | $2.25 |
| C804 | ¼ inch shaft, 50 pF. .. .... .... | 22/6 | $2.25 |
| C804 | ¼ inch shaft, 100 pF. .. .. .... | 22/6 | $2.25 |

**Roblan Broadcast Gangs**

| | | | |
|---|---|---|---|
| RMG1 | Single gang, 10-50 pF. .... | 18/6 | $1.85 |
| RMG1 | Single gang, 10-415 pF. .. | 18/6 | $1.85 |
| RMG2 | Two gang, 10-415 pF. .... | 25/- | $2.50 |
| RMG3 | Three gang, 10-415 pF. .... | 33/6 | $3.35 |

## ROTARY SWITCHES (JABEL)

| | | |
|---|---|---|
| 3-pole, 3-position .... .... .... .... | 10/- | $1.00 |
| 4-pole, 3-position .... .... .... .... | 10/- | $1.00 |
| 2-pole, 6-position .... .... .... .... | 10/- | $1.00 |
| 1-pole, 12-position .. .... .... .... | 10/- | $1.00 |

## TRANSISTOR RADIO PARTS

To suit Zodiac, Grays, Tele-tone, Chevron, Lincoln, Retravision, Home Star and Vista (6 Transistor Radios)

| | | |
|---|---|---|
| Speaker, 8 ohms, 2¼ inch diam., power capacity 200 mw. .... .... | 22/6 | $2.25 |
| Gang with knob, capacity: 6-142 pF. (aerial), 6-60 pF. (oscillator) | 20/- | $2.00 |
| Aerial Coil on Rod .... .... .... .... | 7/6 | 75c |
| Output Transformer, 480 to 8 ohms | 15/- | $1.50 |
| Interstage Transformer, 8000 ohms to 3000 ohms .... .... .... .... | 12/6 | $1.25 |
| Oscillator Coil, 360 microhenry .. | 8/6 | 85c |
| Pot., switched with knob, 5K ohms | 8/6 | 85c |
| 6 Transistors and 1 Diode (comprising: 2-2N408/OC74N, 3-2N410/OC45, 1-2N406/OC71, 1-OA90) .... | 82/6 | $8.25 |
| Three i.f. Transformers, 455 kc. .. | 30/- | $3.00 |
| Complete set resistors and condensers (32) .... .... .... .... .... .... | 42/6 | $4.25 |
| Printed Circuit Board .... .... .... .... | 10/- | $1.00 |
| Cabinet, complete with earphone jack, earphone and carrying cases | 25/- | $2.50 |

## CO-AXIAL CONNECTORS

**American Type:—**

| | | |
|---|---|---|
| PL259 Co-axial Plug .... .... .... | 9/6 | 95c |
| 4087-1 Co-axial Plug (PL259, PTFE) | 14/6 | $1.45 |
| SO239 Co-ax. Socket (suit PL259) | 9/- | 90c |
| 4802-1 Co-ax. Socket (PTFE) .... | 14/8 | $1.47 |
| C32-14 Co-ax. double ended female cable joiner (PTFE) .... .... .... | 17/6 | $1.75 |
| UG175U Adaptor for PL259, to suit ¼ inch cable .... .... .... .... | 2/9 | 28c |
| C32-17 Co-ax. "T" Piece, suit PL259 | 23/3 | $2.32 |

**BNC Series:—**

| | | |
|---|---|---|
| UG88CU Co-axial Plug (PTFE) .. | 15/9 | $1.58 |
| UG290/U Co-axial Socket (PTFE) | 12/6 | $1.25 |

**Belling Lee Type:—**

| | | |
|---|---|---|
| Co-axial Plug (suit ¼ inch cable) | 4/- | 40c |
| Co-axial Socket .... .... .... .... | 3/6 | 35c |
| Co-axial Socket (flush mount) .... | 3/6 | 35c |
| Co-axial Cable Joiner (female) .... | 4/- | 40c |

## THIS MONTH'S SPECIAL CRYSTALS

**FT243 Holders—As New**
**Ex SCR536/BC611 Walkie Talkies**

| | | | | |
|---|---|---|---|---|
| 4080 Kc. | 4735 Kc. | 4950 Kc. | 5360 Kc. | 5780 Kc. |
| 4397 Kc. | 4815 Kc. | 5205 Kc. | 5385 Kc. | 5852.5 Kc. |
| 4495 Kc. | 4840 Kc. | 5295 Kc. | 5397 Kc. | 5920 Kc. |
| 4676 Kc. | 4852 Kc. | 5327 Kc. | 5660 Kc. | 6235 Kc. |
| 4695 Kc. | | | | 6375 Kc. |

7/6 each or 3 for £1. 75c. or 3 for $2.

**DC11 Holders**
5980 Kc. 6420 Kc. 5980 Kc.
12/6 each or $1.25.

# HAM RADIO SUPPLIERS

**5A MELVILLE ST., HAWTHORN, VIC. Phone 86-6465**

North Balwyn tram passes corner. Money Orders and Postal Notes payable North Hawthorn P.O.

We sell and recommend Leader Test Equipment, Pioneer Stereo Equipment and Speakers, Hitachi Radio Valves and Transistor Radios, Kew Brand Meters, A. & R. Transformers and Transistor Power Supplies, Ducon Condensers, Welwyn Resistors, etc.

## VICTORIA

### EASTERN ZONE

The holiday period has come and gone with many Amateurs having gone mobile or portable on h.f. and v.h.f.; and about the end of December and beginning of January record breaking 2-metre openings were observed to New Zealand. Reg 3AWV and 3ZPL are known to have heard ZL's but I'm not sure if they were lucky enough to work any.

Six metres is THE band in Sale and all active Amateurs of which there are five have worked DX on the net frequency of 53,032 Mcs. Most have two transceivers some three. Monitoring of the net is done over a considerable period of the day so what about giving us a call on the net frequency. Ralph VK4ZCH/3, who is operating portable at East Sale, is the latest addition to the 6 metre net. Talking of additions, Ralph's XYL has recently presented him with another harmonic, so congratulations to Ralph and Dori.

David 3DY will be a fully fledged duck talker by the time this comes ou in print, as he will have taken delivery of a Galaxy 5. There was a bit of doubt whether a Swan or a Galaxy would grace the shack. Margaret liked the Swan and David the Galaxy, but pure logic won—or was it the toss of a coin? Better watch out for the Muscovies at the shack door now David. Reg 3AWV is also a s.s.b. fan and is working steadily on his gear. Whether this is for 80 metres or Reg's favourite band 2 metres I don't know.

VK3SJ at Yarram is in the same line of business as Tom 3APT at Mt. Taylor, namely that of forestry. Tom is heard quite regularly on the Friday night zone hook-up at 2000 hrs. on 80 metres.

During the holiday period VK3ZOE Jim was heard on 6 and 2 metres from Mt. Taylor and VK2ABU Alec, mobile marine on the Gippsland Lakes, on s.s.b., lucky blighter, my bank manager would look sideways at me if I even thought of sideband let alone cruising around in a boat. 73 for this month, VK3UG.

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## QUEENSLAND

The January general meeting of the Queensland Division was held on Friday, 28th January. At the conclusion of general business, Mr. G. A. Kirkegard, of the Radio Branch, P.M.G.'s Department, presented a lecture entitled "Special Aspects of Intermodulation Interference." A well attended meeting was shown a number of ways in which unwanted signals may mix with other signal sources to produce resultant signals of b.c.i. and t.v.i. nature.

The January Council meeting was held on Wednesday, 26th January. The meeting was particularly important as the number of agenda items indicated. The following is a resume of the proceedings of the meeting.

Seventeen members attended the meeting which is something of a record. An apology was received from Pat 4KB. After usual formalities and inward and outward correspondence a discussion on VK4 A.O.C.P. classes began. Andy Thompson came from Pomona to speak on notes suitable for use by an A.O.C.P. class. A letter was read from Stan 4SA which was put in the form of a Federal Convention agenda item. Jack 4JQ, who is a class manager, spoke on the advantages and disadvantages of various types of class notes. The result of the discussion was the formation of a sub-committee to prepare a syllabus, to select suitable textbooks if available and to generally determine policy. The sub-committee will consist of Jack 4JQ, Reg 4UX and Stan 4SA. Council thanked Mr. Thompson for his attendance and offer of notes.

An application has been made to the P.M.G. Department for the issue of a call sign VK4ZWI to this division. Very soon the magazine 73 should be included in the library. Paul 4VS expects some demand for copies of this magazine. Lawrie 4ZGL reported on Federal matters which took some time as many items were discussed. Some possible Federal Convention agenda items were also discussed. On the subject of Youth Radio Clubs, Jack 4JE spoke on the need for a committee of three to administer the scheme. Charlie 4UC would look after general clerical work, Jack 4JE would handle examinations associated with the scheme. A third person to co-ordinate activities is needed. It seems that on the new Council to be elected in April there will be a Y.R.S. co-ordinator.

The following items were dealt with under General Business: Lawrie 4ZGL submitted his resignation as Federal Councillor and nominated Dave Portley 4DP as the new Councillor. It was decided to defer the Annual General Meeting of the Division until 22nd April. It was felt that if this were not done, a new Council would be faced with the unenviable task of carrying out arrangements formulated by present members. It was considered that such a procedure would have been most unfair to new office-bearers.

The C.G. and G.K. Cup is to go to the highest scorer in the R.D. Contest. Last year's top scorer was Leigh 4RH. The Cup will be suitably inscribed and forwarded to him.

The 1966 State Convention will be held this month (March) on 25th, 26th and 27th. Bob 4ZRC will again organise the Convention this year. If conventions of other years gone by are any guide, then this year's will be something to be remembered. It is hoped that this year there will be menu improvements as well as facilities for entertainment/amusement of the XYL's. There is a possibility of films being shown at night. Good prizes will be offered for the competitions that will be conducted. It is hoped that this year a large variety of gear will be at the Convention to give members an idea of what the other fellow is building. Some disposals items will probably be on hand as well. A Special General Meeting will be held to enable country members to record their views more readily than they ordinarily could. State conventions are always a lot of fun and this year will be no exception.

A discusson was held on the inclusion of receipts in "Q.T.C." The January issue of "Q.T.C." contained a supplement which asked for your views on this publication. Answers received to date have been encouraging. Many new features have been included and your reaction to these is sought. You are reminded that the insertion of advertisements in "Q.T.C." is free to W.I.A. members.

There is a possibility of some new QSL cards being obtained. However, the QSL officer, Jack 4JF will have further details if negotiations are successful. As stated previously the January Council meeting discussed a large volume of business and I notice that the final sentence in preliminary minutes of the meeting reads: "Closed with relief at 11.04 p.m.!"

As a sideline during a short lull in proceedings at the meeting a card from TF land (Iceland) was produced by one of our ardent 20-metre s.s.b. members. You could see the envy on the faces of others present.

There are some items of general interest to hand. The following VK4's have been selected to serve on the Amateur Advisory Committee: 4ZAV, 4PX, 4LA, 4FJ, 4XK, 4YP.

A.O.C.P. classes this year will be held each Wednesday night in the Small Hall of the Brisbane Institute of Social Services, Berwick Street, Valley, Brisbane. Classes will tentatively (at this stage) commence the first week in March. Fees will be $6 for W.I.A. members. Subscription for non-members is of course $6 plus W.I.A. membership fee. Intending students should enrol with the Hon. Secretary at Box 638J, G.P.O., Brisbane.

Reg 4VX who usually edits the news for 4WI has taken a month's leave of absence.

Oscar IV. has had a difficult time here in VK4. There was very little interest shown. However, a few stations have now constructed 432 Mc. gear and it is hoped that as Oscar will be up for a fair while, some contacts may be made.

Finally, the 1966 Federal Convention will be held in Brisbane this Easter. With the co-operation of members particularly those residing in the Brisbane area, there is no reason why the Convention should not be a success. In Queensland, more than in southern states, Easter is looked upon as the last holiday before the onset of winter. Quite a number of events are scheduled for this period and the attractions are varied. Some will spend the few days quietly along the seashore, while others—notably the v.h.f. enthusiasts—will no doubt head for the bush and the rigours of camp life that the annual Scout Eastern venture brings. It is hoped, however, that all will contribute in some way to the Convention.

### TOWNSVILLE AND DISTRICT

Pleasing to note at long last that the constant reference to reforming the local radio club has at last borne fruit. An initial meeting being held in the Auditorium of the local broadcasting station, 4TO. About a dozen came along and it was noted that most of the faces were quite new, chaps who had only held their call signs a few years. It is being decided to follow along the lines of the old club and affiliate with the W.I.A. Meetings to be held the first Thursday of each month. Also that the old timers be canvassed with a view to their rejoining. With the infusion of new blood it is to be hoped that the club will regain and surpass the old membership. Next notes will show the office-bearers.

Charlie 4BQ and Evie the better half (who always offers a cuppa) has a new call sign of 4EQ returned from holidaying in the far north to welcome quite a few visitors. Had the pleasure of entertaining Rusty 4JM and his wife Jocelyn 4JJ from around Bundaberg, while Bill 4ZWB from Charters Towers called in, plus a few whose call signs escape me. Ted 4EJ has returned from the big smoke. This time failed to bring back our bridge from VK2 land. Heard that Arnold 9AG contemplating another visit to the city of 3 S's, Rockhampton, in the near future and will call for a cuppa. Also has ideas of shifting back to the mainland. Eric 4EL heard on 28 Mcs. giving slow morse practice to the boys who hope to break the sound barrier. Rumoured that Eddie 4WH will act as secretary to the club until someone else takes over. 73, Bob.

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## SOUTH AUSTRALIA

The monthly general meeting of the VK5 Division—sometimes known as the R.D. Division—was held to a somewhat below average attendance of members and visitors in the clubrooms. The usual Chairman Ross 5KF was absent without leave—from me anyway—and the meeting was called to order by the acting cheirman, Geoff 5TY almost on time. The business side of the meeting mainly consisted of the reading of the agenda items submitted for the Federal Convention, one or two of which created a little interest and discussion, but on the whole they were passed through in almost record time. It was decided that the three section leaders in the R.D. Contest should have the privilege of holding the trophy in their QTH's for one month, and as Harry 5MY, the c.w. section leader, was the only one present of the three, he was formally presented with the trophy, mid jeers and cheers, his plaintive cry of "What shall I tell the wife" being lost in the general noise. This pretty well completed the business part of the meeting, aside for a couple of minor and local subjects, and a smoke-oh was called for, with George 5RX taking the opportunity of distributing the QSL cards. The meeting resumed for the lecture, which was announced as "V.h.f. for the Beginner," and was to have been a three-way effort by Bob 5ZDX, Peter 5ZKA and Colin 5ZHJ under the headings of Receivers, Transmitters and Aerials.

Unfortunately time squeezed out Colin from his effort, but he will be given his opportunity to complete lecture on aerials at a later date. Both Bob and Peter did an excellent job with their subject despite the opposition from the clock, and as a good deal of their talk was illustrated on the blackboard, nothing further can be written, except to say that the vote of thanks proposed by that doyen of the v.h.f.'s, Pansy 5PS, was received and acknowledged with acclamation by all present. It was announced at the meeting that following a well presented case, permission had been granted by the authorities for VK5 to have a 24-hour unattended v.h.f. beacon on 53.0 and 144.8 Mc., and as soon as the necessary paper work had been attended to they would be in operation. Geoff. 5TY, our genial Federal Councillor, ably assisted by Bob 5ZDX, prepared the case for the beacon, F.E. handled the matter with the authorities, and from all this VK5 now has what is believed to be the first 24-hour unattended v.h.f. beacon. Rah-Ras-Rah-VK5-VK5-VK5—all right, I will shut up, put that gun away!

**VK3 S.W. ZONE CONVENTION**

**12th, 13th, 14th March, at Warrnambool**

Booking Fees:
Accommodation, $3.
Saturday dinner and Sunday lunch, $2.

Contact Harry Duggan, VK3XI, or Bill Wines, VK3AWW, C/o Y.M.C.A. Radio Club, Henna St., Warrnambool.

**1966 VK4 ANNUAL STATE CONVENTION**

Held at **"Alexandra Park," Alexandra Headlands,** on **25th, 26th, 27th March.**

Further details of programme to be published in "QTC."

Joe 5JT was heard on 14 Mc., his usual happy hunting ground, using a new ground plane and hoping for more than average success. He succeeded in getting "across the water" all right—to 5BS who lives across the other side of the Patawolonga boat haven, and also to Tom 5TL. Heard Joe say that he will be 80 next year, which would surely put him in line for the title of the oldest active VK5, if not the oldest VK—any takers?

Gilbert 5GX now completely recovered from his sojourn in hospital, but naturally must be still a little careful.

Flattery to the left—Flattery to the right—in fact, flattery all round. Did you cop the correspondence page in the January issue of the magazine? Three letters to the Editor and two of them containing attempts to shoot me down in flames—and to make it better—the Editor agreeing with them. Little do they realise that they are attempting to take the bread from the mouths of my three XYL's and my 27½ children, to say nothing of a couple of noughts off the fabulous salary granted to me by the magazine committee. Strangely enough, I agree with them entirely, in fact, I would not only cut the notes down, I would cut them out altogether. After some 20 years or so of murdering the King's English on behalf of the VK5 Division in the magazine, I could not agree with them more, however, so far nobody has shown any inclination to usurp me, in fact, I gave the notes away for a while about seven years ago, but was prevailed upon to take them on again on a temporary basis until a regular writer was found. So far everybody is so busy running in the opposite direction that I am still on a temporary basis! Thanks for the compliment chaps, but please remember my sensitive and shy nature, I bruise so easily!

Had a visit over the festive season from Bruce (8MC, ex-5MC), together with his XYL Pam and the two harmonics. They were down on leave from VK8 land for a short period, and were to have left that day for home. However, the floods threw a spanner into the works, and although Bruce was to fly back over the week-end, the XYL and harmonics did not know when they would be moving back. He brought "The Thing" down with him and had a couple of contacts on a temporary aerial, and as he had it in the car with him he offered to show it to me, but my chilly reception to this offer seemed to dampen his enthusiasm. How presumptious can they get?

Since the day I decided to label s.s.b. as "The Thing" it has bobbed up in the most unlikely places, and after getting over the shock of it appearing in VK4, without any warning it rears its ugly head in none other than VK3—and I quote—"Mr. Arthur Barnes, of Richmond, Victoria, opened a bottle of tomato sauce today to finish a spaghetti dish he was making for his dinner. He was rather pleased with his culinary efforts and looking forward to enjoying it. Then something happened, he had just started pouring some sauce when out of the bottle popped "The Thing." "It was about six inches long and I could see it stretching from the bottom right up to the neck," he said. "It seems to be some machinery part and I think there are more steel pieces in the bottle. I was making Sunday dinner for the friends I stay with, and one of them is sick. Of course, we could not eat the food after that"—unquote. Well, did you ever? And in VK3 at that!!

Talking about "The Thing" — and why I should be talking about such a subject beats me—I spent all of January thinking about various schemes as to how I could get down to Hamilton, heavily disguised, plant a bomb under the meeting place of the Sidebanders' Convention, and then hotfoot it for home. I finally gave it away in disgust, and got my own back by sending a tape recording as requested by Dud 2DQ to be played at the final meeting.

I await with interest as to the reactions of those who hear it, always allowing for the fact that it won't be played back just for spite, but going on the reactions of a letter I received from Ern 3AEM to whom I was instructed to send the tape, I fear the worst. By the way, this Ern is hardly a novice in Amateur Radio, he was A3JP back in the dim, dark past. Anyway, his XYL Vera is a bit my way, she heard the tape in a trial run, and asked for a replay. Attagirl Vera, you will do me.



Heard Cec. 5BZ calling his namesake G5BZ on the 14 Mc. band the other afternoon. The c.w. has not gone back, OM, quite a nifty fist, although I gathered from the number of times I heard you calling, that there was no reply from G land.

Those of you who remember George 5EC when he was at Ceduna will be interested in the following—and I quote—"The former radio engineer of the Flying Medical Services radio base of the Bush Church Aid at Ceduna will begin a new job as a priest late in January. He is the Rev. G. E. A. Cameron who resigned from the Ceduna post to enter the ministry. Mr. Cameron leaves an appointment as assistant curate at the Church of the Ephiphany, Crafers, to become priest-in-charge of the Anglican Mission of O'Halloran Hill." Congratulations George, it seems a long time since the almost daily skeds on 40 mx with Gordon 5XU. Again, congratulations and best 73.

Both John 5KX and Rex 5DO made a welcome re-appearancse at the Christmas Social after their recent overseas jaunt. I did not see them myself, being absent on other business—and despite remarks to the contrary—not monkey business either—but had I met them I would have been more than pleased to tell them both, just what they could do with thier travelling bags. Fancy, both of them sneaking off overseas without even as much as checking with me as to whose bag I was prepared to carry. Such ingratitude.

Johnny 5KO heard on 14 Mc. at times—apparently he has decided to retire now and again from his beloved 160 and 80 mx—and secure the unexpected title of "all-bander." Quite a potent signal, too, OM.

Quite a number of unofficial delegations finding their way to the ears of both sides of the local Parliament with respect to the controversial Licensing of Electricians Bill, and being received with courtesy and attention on all sides. It is possible that the powers-that-be might have a change of thought on the matter, considering all the representation from the various bodies concerned with the effects of the bill, and who knows, we might see a revised version of the bill yet. Here's hoping. Incidentally, since my recent debut into Parliamentary circles as a member of the VK5 delegation on the above matter, I have been addressed on occasions as the "Dishonourable Member for Rose Park." You all know what you can do!

Bob 5OD reported as back from his recent trip to the U.S.A., complete with an HW32, and itching to get on with the Y.R.S. scheme, especially that he now has such an excellent committee to help him.

Incidentally, the Adcola iron, a gift from VK3 to VK5, has been sent to the Port Pirie Youth Club, as they are considered to be the most up-and-coming youth set-up at the moment, for presentation to their most promising young member. A gift from VK3 to VK5?—I must look into this—what have I heard about, "beware of gifts from etc., etc., etc."!!

Ron 5KS is almost settled in at Morphetville, and once the aerial is up he should be in business once again. However, despite his oft-repeated boast that he is always using the XYL's household gear for his experiments, it would seem that until all is tidy and snug within the said household, there will be no aerial.

According to reports at the meeting, W.I.C.E.N. is growing apace with more than 40 members, and plenty of enthusiasm to go with it. Geoff. 5TY of course as the new co-ordinator, is cracking the whip in all directions, but I have been told on the best of authority that his bark is worse than his bite.

Who was the VK5 chappie who was heard calling "CQ 40 mx" on 14 Mc., and when tipped off by an anonymous voice as to his mistake, immediately became considerably confused and came back and called "CQ 80 mx," finally retiring in absolute confusion. There will be no prize for the answer!

Brian 5BI was a welcome visitor at the meeting night, although he seemed a little coy when I asked him how the boat was coming along. Little did he know that a little dickey bird had told me that on his first trip out on the briny, he tossed out the anchor, only to discover that it was not tied to the boat. To cap it all, the next time he went out he was intrigued to see a bright object on the bottom of the sea, and when he wanted to know the time later, one look on his wrist soon told him what the bright object was.

It would seem that I will have to find a new place to deposit my empty bottles and collect the cash. My favourite banker Keith 5KH has been converted to "The Thing." which fact brings to an end our business dealings, He had such a kind face, too, but just fancy asking an owner of "The Thing" for an overdraft. I might stoop sometimes, but not that low!

My favourite Scotsman Dave 5DS was also at the meeting, and when I asked him when his New Year celebrations ended, he said, "When the bottle is empty." Now what did he mean by that? How could a bottle control the end of the New Year. These Scotsmen are always joking.

Gilbert 5TX reported to be on a tour of the United States for the purpose of familiarising himself with instrumentation for further use at the new Torrens Island power house. Another one who sneaked off without giving me the opportunity to refuse to carry his bags.

Comps 5EF and John 5KX both noticed at the meeting, and both seemed a little bewildered with all the new and youthful faces in the front rows. So much so, that one of them said to me, "Is this the W.I.A. meeting we used to have?" Feeling my grey hairs somewhat sorrowfully, I was forced to tell them that it was.

Our youthful treasurer Harry 5MY, soon off on a tour of the Pacific areas, and hoping to meet up with Malcolm VR2BJ at Suva. Malcolm is an ex-VK5, having been 5SU, then 5MU, and was best man at Harry's wedding. By a very strange coincidence, the boat only stops at Suva for one day, and this will be Harry's wedding anniversary. I hope he remembers to tell his XYL!

Heard Charlie 2ADE and Colin 5RO in QSO the other day, and in answer to Colin's query why he was on a.m. and not s.s.b., Charlie said when he called CQ on s.s.b. he always had more calls than he could handle, so was using a.m. for peace and quietness. Colin said he once felt like changing his mode and decided to use c.w., but could not find a key in the shack.

However, this did not stop him, he just whistled into the mike and managed to get a contact too. By the third over, his little wooden whistle wouldn't whistle any more, and it took him about three weeks to recover from the ordeal. I gave away listening at this point because I was not sure just who was pulling whose leg, but I felt like breaking in and telling them both of the day that I changed from a.m. to s.s.b., only to find that I had laid an egg!!—get it—laid an egg—quack-quack—get it?—never mind—perhaps it is not funny.

73 de 5PS PanSy to you.

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## WESTERN AUSTRALIA

New Year's Greetings to all readers, although we are entering into the third month of 1966, the season is still quite new, so I consider greeting are still in order.

Note Christmas meeting was as usual a get-together of members and visitors. A most enjoyable evening was held by all.

Conditions on 40 mx so far have been quite on the improve. Country listeners have the benefit of 40 mx especially Sunday W.I.A. news, not forgetting the fact of relay also on 80, 2, 6 and 160 mx. This in all is quite well received in the city and also country areas, from the southern coast to Port Hedland and Derby, some 1200 to 1800 miles north of Perth, even Arthur 6MJ and XYL Jackie are able to receive in Broome. Arthur extends best wishes to all. Has a rig on 20 mx and on the look out for locals.

Many readers will be interested to hear that VK6WS Skipper will be coming on the air again, I'm not sure what bands, but feel very sure that many will be looking forward to having contact and giving much enjoyment to a grand old gentleman.

Mac 6MM portable Narrogin operating 6 mx, also 80 mx. 6KJ Bernard has to hand a new black box (122), opps, sorry, Bernie, I meant 350 Swan. Note Jack 6BW has got things working well from his new QTH "Yunderup," situated close to the Murray River. Jack has spent some of his leisure moments baiting the hook, that would be for sure.

Tom 6MK, previously heard portable Albany, always a very nice drop of s.s.b. from that little rig, Tom.

Well chaps this about winds up the works for now. 73, Bob 6KN.

## NEW APPOINTMENT

Mr. Edward F. Coate (VK3AIP), Director and Sales Manager of Collins Radio Company (A/asia) Pty. Ltd., has resigned to join Bendix International Operations of the Bendix Corporation, 605 Third Avenue, New York, N.Y., U.S.A.

Mr. Coate has been appointed Assistant Manager, Avionics Equipment Europe, and will be based in Amsterdam.

He will be directly responsible for relations with the Airlines of Europe, European airframe manufacturers and Foreign Government Agencies utilising Bendix Avionics Equipment.

## TASMANIA

Well, the holiday season is well and truly over, and most people have recovered from the over-indulgence of various things, and although this is the third month of 1966, it is the first month of our (Institute's) financial year, and so is a busy month in all Divisions, with annual meetings and dinners, etc., and it behoves us all to pull our weight and help out where at all possible, which leads me to the point I'm triyng to make—the least every licensed member of the institute can do if he is at all interested in his hobby, is to record a vote in the election of his Divisional Council. This year we lose three of our most important and hard-working members, Charlie 7KS, our poor overworked Secretary is resigning due to change of job and more work as a consequence; Tiny 7JD also finds he has too much else on his plate, and so regretfully steps down as Treasurer; and likewise Ted 7EB, our Bulletin Editor and general agitator and factotem has a transfer to another brinch in his place of employment, and finds he has to go back to night school for the next couple of years. So you see we are really in a spot. However, there is one bright spot, Anne 7LY at our February general meeting spontaneously volunteered for the job of Bulletin editor, and I'm sure I speak for you all when I say "Thanks Ted for a job well done," and "Thanks Anne for showing all the male members present at the last meeting that although you are only small in stature you're big enough to tackle a man-sized job." I feel sure every member will be behind you, and assist you wherever possible.

Winston 7ZAP got among the DX during this year's Ross Hull Contest, and worked into ZL on 2 metres with really F.B. sigs. both ways. Good work Winston.

Our Annual General Meeting and Dinner is to be held in Hobart this year, on Saturday, March 26. I hope we will see as many members as can possibly make the trip from other zones here for both the meeting and the dinner—what about making up a party—three members, their XYL's or YL's, fit nicely in the averaged-sized car—park the harmonics with the neighbours or mother-in-law, and come to Hobart for the week-end, 26th-27th March. Remember also please, gentlemen, sub. are now due. 73's Geoff. 7ZAS.

### NORTH-WEST ZONE

The first meeting of this Zone for the new year took place at our usual headquarters, Lakin's Hall, Ulverstone, on Tuesday, 1st February.

Although I was not present my spies informed me tht the meeting was a social one with approx. 24 in attendance.

The chief attraction of the evening was a lecture given by Mr. Bonde, of the Meteorological Division of the Weather Bureau. His subject being, "Radio Aids on Weather Forecasting." Members were given a first-hand insight into that particular field and some interesting photos were shown.

After the lecture, George 7XL got up and addressed the gathering on his recent visit to the Hamilton S.s.b. Convention in VK3 land. My spy told me that George was very impressed with all the latest gear on display, particularly the kilowatt linear amplifiers suitable for mobile operation—so the rumour goes—some of the s.s.b. gang switch on their "2000 watts pep" linears when conditions get a bit rough or when some of the a.m. gang get too close in frequency to their net!!!

Just goes to show what lengths some people go to, just for their own selfish satisfaction—I've always thought that 300 watts pep is more than enough power for anyone. Anyway Sam 7SM is more than pleased with his Galaxy V. and since he took delivery late last year, I've been told that Sam has worked over 100 countries on s.s.b.

The mobile outfits will soon be arriving and then I guess a few "halo" antennas will make their appearance on the highways. I suppose these bods will be known as "saintly drivers."

The meeting concluded with another auction—but I don't know who bought what and why.

Another member of this zone is leaving us—Bruce Kelly. The best of luck in your new job Bruce and keep the N.W. Zone informed of your activities over the air occasionally.

Seems to be all this month but hope to see you at the next meeting. 73's, VK7MS.



## HAMADS

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**HALLICRAFTER** SX101, Mk. 2. Hamband Rx. Ser. No. 175324. Switched SBs. Xtal Cal., 0.5 Kc., c.w. sel. Ex. order, £120. S.A.E. info., 25 Millen St., Hughes, A.C.T.

**HT37** Transmitter, a.m./c.w./s.s.b., as new. Must sell to best offer. Your chance of a good buy. 126 McCarrs Creek Rd., Church Point, Sydney.

**RECEIVER,** Heath GR91, 110v., 4 band, b'cast to 30 Mc., £17/10/-. Sig. Gen., Advance model B4B, 30 Kc. to 30 Mc., £21. V.T.V.M., £15. Len Hearnes, 166 Sycamore St., Caulfield, Vic. Ph. 53-3380.

**SELL:** Mosley TA33 Jr. Beam (s.w.r. 1.2 to 1 phone, 1.5 to 1 c.w. all bands), 65 ft. 52 ohm co-axial and fittings, new (not war surplus), £35. Tower, 43 ft., galv., self supporting, 3 ft. base, made to order, £35. C.D.R. Rotor AR22—220, little use, £15. Duodoublet antenna, 40 and 80 mx, VK2JR special balun (s.w.r. 1.3 to 1), 45 ft. 75 ohm co-axial (new) and fittings, £7. Crystal mike, p.t.t. with 3 cont. plug. £3. G.D.O. Q-Match, new, and Antennascope, complete, £17/10/-. VK3VH, 34 Marshall Ave., North Clayton (nr. Monash University), Victoria.

**SELL:** TA33JR Triband Beam, complete with automatic rotator and control unit, £57/10/-. Also "Linear Systems" mobile P./S., 800v., 450 mA., 275v. and bias, £60. Suit any transceiver. VK3XO, 44-1823 evenings only.

**TYPE** S a.c. Power Supply, unmodified and in excellent condition, 550, 300, 250, 12 v. d.c., 12 v. a.c., \$19. Six metre Converter with power supply, on chassis, \$10. Receiver R1155B with speaker and power supply, \$55. 40 watt Mico miniature Soldering Iron with low voltage trans., \$6. D.c./d.c. Converter to suit s.s.b. transceiver, 750 v., 250 v., input 12 v. d.c., with two inbuilt control relays. The two supplies in copper box 10 in. x 10 in. x 1½ in., \$45. W. D. I. Smith, VK2TS, R.M.B. 100A, Mangrove Mtn., N.S.W.

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